

PRACTICAL INSTRUMENTATION

BY

RICHARD HOFMANN.

TRANSLATED BY

ROBIN H. LEGGE.



PART II.

THE WOOD-WIND.



LONDON
AUGENER & C^o.



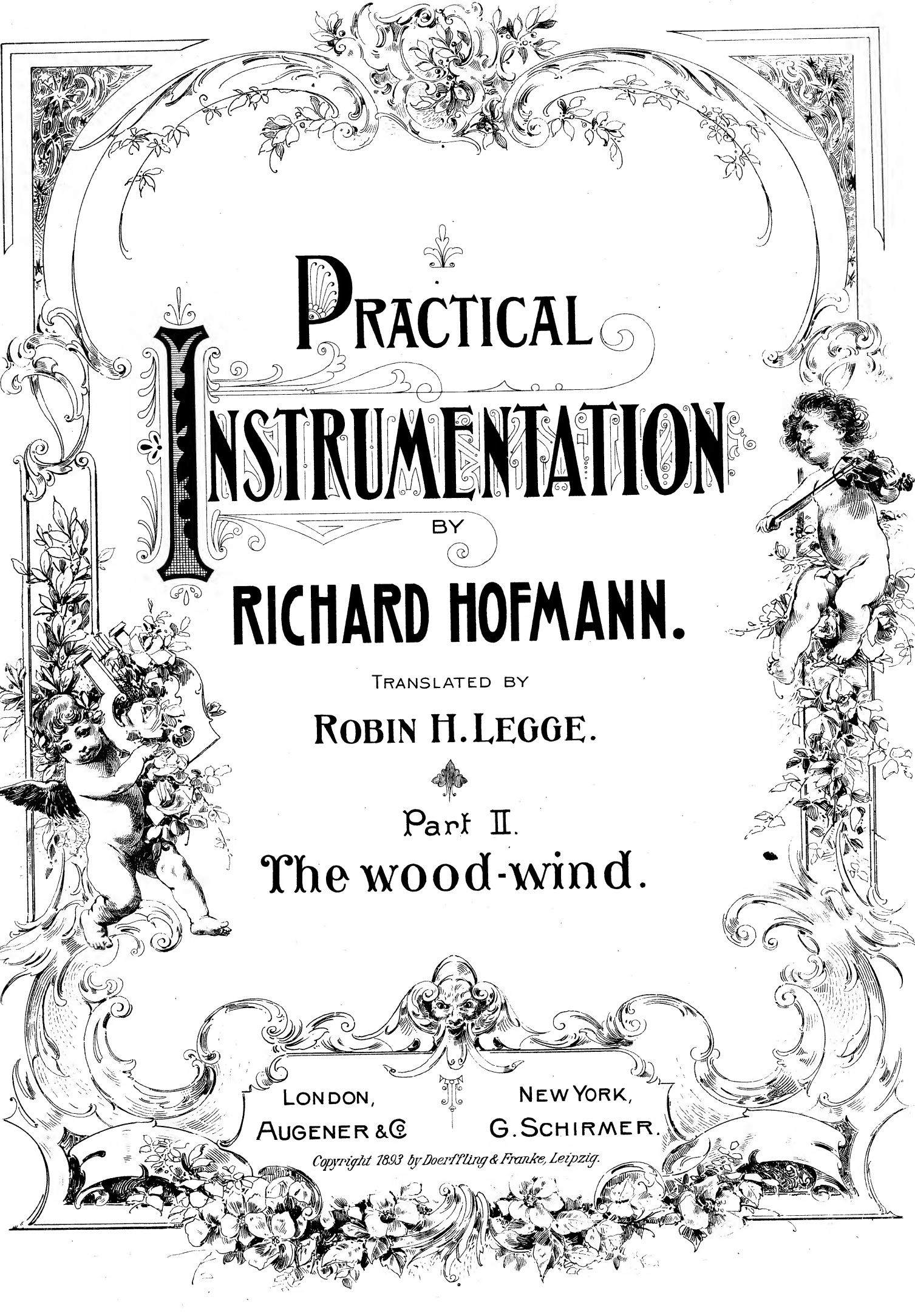


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PART II.

The wood-wind.

To this class of orchestral instruments belong all those whose body is either partly or entirely of wood, as the flageolet, Czakan, oboe, English-horn, clarinet, basset-horn, bassoon, bass horn, saxophone and sarrusophone*). These instruments, which are of widely different character, are subdivided into 3 classes: 1) these played with a mouthpiece or hole, as the flute, flageolet and Czakan; 2) these having a tongue or reed, as the clarinet, basset-horn, and saxophone; 3) these having a double reed, as the oboe, English-horn, bassoon and sarrusophone. All are chromatic in compass, the notes being made by opening or closing holes with the fingers of both hands.

In the orchestra the wood-wind ranks next the strings because of the number of uses to which it can be put. Its tone is more powerful and fuller than that of the strings. A clever player can in certain registers produce a bright, soft tone as of the strings, without overpowering the latter, yet the difference in tone colour is quite distinct. The compass of the wood-wind from the deepest tone of the contrafagott to the highest of the piccolo extends to upwards of 6 octaves that can be made use of by a composer.

*) The body of these last two instruments is of metal; see later saxophone and sarrusophone.



The Flutes.*)

Of the wood-wind the flute should stand first. It was made on two different systems — different in construction, technique and tone.


- 1) The old style of flute, made from wood, a tube conical from below, with open holes and many keys.
- 2) The more modern (Böhm) flute made entirely either from metal or wood, bored also conically or cylindrically, and having all keys. The character of the tone of 1) is tender and capable of every conceivable kind of expression, and it unites well with the strings and wood-wind, wherefore this flute is the more used in Germany than the other. That of 2) is metallic and reedy.

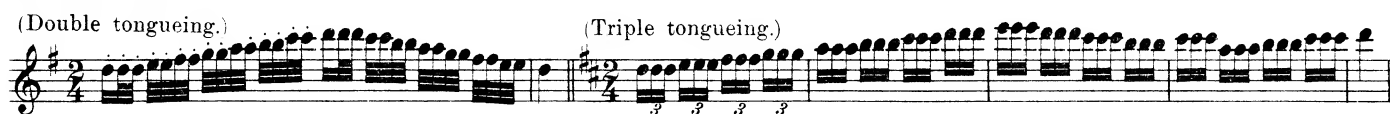
Music for flute is written in the violin or *G* clef.

The above-mentioned flutes*) have a compass from



with all

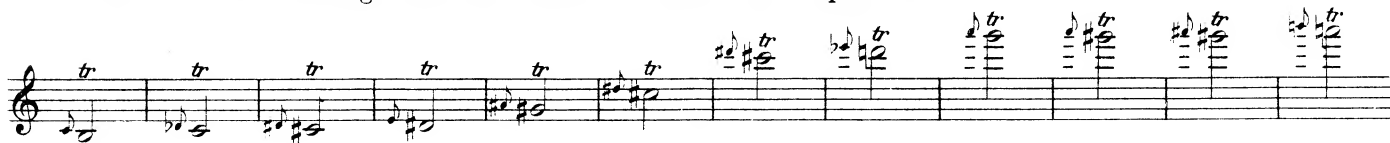
chromatic intervals, (the  is not playable on the Böhm flute), and the notes sound as written. With the exception of the notes in the extreme registers, all can be played in every variety of strength, in slow or quick tempo *crescendo* or *diminuendo* at will. The flute is one of the most useful of the wood-wind family since the player can play in any key, diatonically or chromatically, in slow or rapid tempo. The keys with more than 4 sharps or flats, however, are rather more difficult in rapid passages. As in the case of the violin, so it is too with the flute — all manner of “bowing” or phrasing is possible. Wide intervals can be played *legato* or *staccato* without difficulty. The repetition of an interval, and diatonic or chromatic progressions *staccato* in rapid tempo are easily rendered by means of special tonguing — ‘a rapid movement of the tongue against the roof of the mouth’ (see Prout, Instrumentation, p. 59). This is called double, or triple tonguing, and is shown in the following example.



In the deeper positions this becomes more difficult.

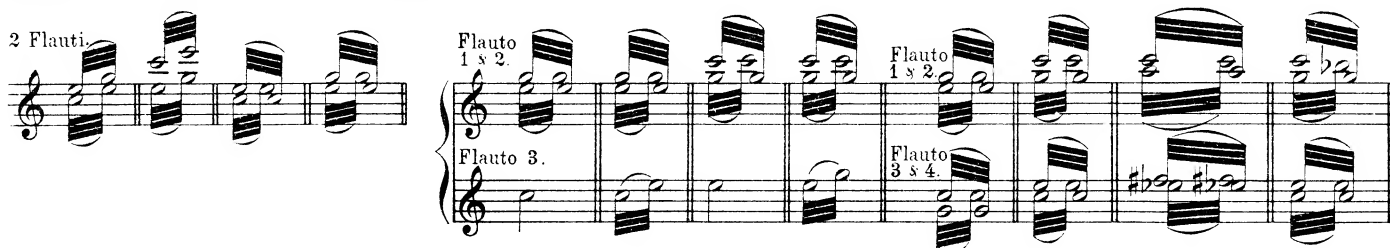
Ornaments of all kinds are possible on every note of the flute's compass, but they should not be used on the very highest notes.

Shakes on the following notes are difficult — some even impossible.



A repetition, long or short, of a rapid combination of the above tones is difficult especially in the extreme registers. But shakes on all the other notes with tones or semi-tones are easy.

Tremolo can be executed by 2, 3 or more flutes, but only in the manner described as ‘undulating’ in the chapter on the violin. It is written thus.



In the deeper register these examples are not only more difficult to play but less effective, and in the higher they can only be used *forte*. When writing such tremolos care should be taken that the tones to be

*) In all scores one often plays the term *flauto traverso* a term used to distinguish this flute from the flute *à bec*, the predecessor of a present-day instrument.

played by one player are not farther apart than, at most, a fourth, for wider intervals are difficult to play legato in a very rapid tempo.

The technical capacity of the flute is explained by the following examples, in which it is treated as a concert instrument. The examples in score in this and other parts will show how it may be used in the orchestra, whether as solo, to play or strengthen the melody, as a decorative means or to fill in the harmony.

Kummer. Flute Concerto in E-minor.

Piu moto.

Müller. Flute Concerto in D. r.

Allegro.

Kummer. Flute Fantasia, op. 93.

Allegro.

The appended table of the compass of the flute can be divided into several registers thus:

folgt bezeichnen kann:

With all chromatic intervals.

deep medium high highest

The deep register sounds weak, mysterious, even mystical; when *f*, rather awe inspiring; the medium register is idyllic and tender; the high is brilliant and clear without the least hardness; the highest tones are difficult to play in tune and only available *f*. The passage from one of the above positions to another must not be thought to begin on one particular note, as would perhaps appear from the table. Much depends upon the individuality of the player. In fact the bridge between any two registers is very difficult to realize in rapid scales or passages of chords, though it is easily observed when wide intervals are played not too rapidly. The following examples show the effect of the flute in various registers:

lagen.

Wéber, 'Freischütz' Finale Act II.

Andante.

(awe inspiring)

Weber, 'Freischütz' Aria Act II.

Andante. Flauti. Adagio.

Agathe: Welch schön - ne Nacht! (gloomy and dark) Lei - se

Meyerbeer, 'Prophet' Act II.

Andante.

(gloomy)

Weber, 'Euryanthe' Scene and Gavatina Act III.

Largo.

Weber, 'Freischütz' Act III, No. 16, Finale.

Andante quasi Allegretto.

Solo. Flauto. *p*

(the 1st 8 bars are gentle and peaceful, the next 8 rather brighter and more stirring.)

Georges Bizet, 'Carmen' Act I, No 3.

Allegro.

Flauti. *mf* (bright) *ten.* *tr.* Cornet.

See also score examples, parts III, IV and V.

The D-flat flute.

This was built after the old (possibly also the original Böhm) style; music for it is written in the violin clef, and it belongs to the transposing instruments, since the notes sound a semitone higher than they are written. The compass is:

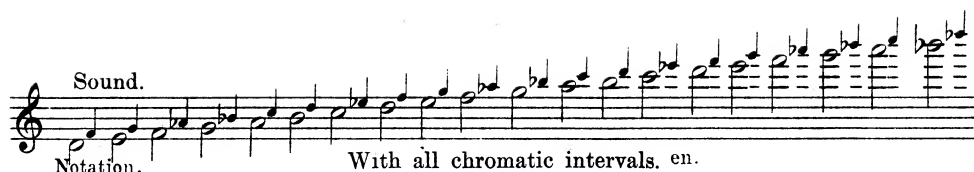
Sound.

Notation. (Mit allen chromatischen Zwischentönen.)

With the modern mechanism the capabilities of this flute are the same as those of the above-mentioned C-flute; and the tone too, is practically the same. It is used only in military bands and is easier for the player, since military music is usually written in flat keys.

The E-flat (or Third) flute

was formerly much used in both military bands and the usual orchestra, but is now rarely met with. It belongs also to the transposing instruments, its pitch being a minor third higher than the C-flute. Its compass, and the notes as written and sounded are:

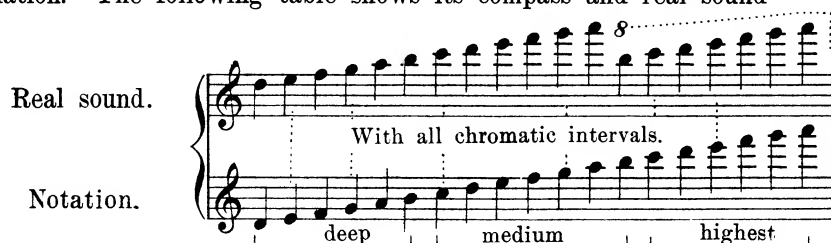


The tone of this flute is throughout rather sharper than that of the ordinary *C*-flute; but as the instrument is not supplied with modern mechanism, its services are smaller. Gade has used it in his "Crusaders", and Spohr in his symphony 'The Power of sound'.

The small Flutes.

The small C-flute or piccolo

is an octave higher in pitch than the great *C*-flute; but its compass is less extensive and the quality of its tone not so capable of modulation. The following table shows its compass and real sound



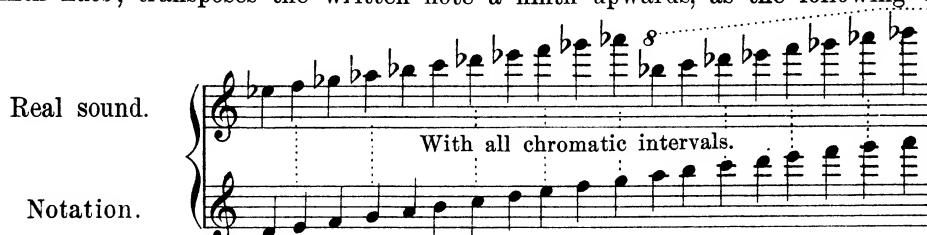
Its technical possibilities are considerably less than those of the great *C*-flute not only because of its smaller size, but also of the difficulty of producing its higher tones. Still it is capable of much in the way of diatonic and chromatic passages, in chords, in rapid *tempi*, and of ornament, shakes etc., within the compass:



In scales passages this may be exceeded if necessary. In the character of its tone it differs widely from the great *C*-flute, as is shown in the following description of the registers given in the example above. The deep register sounds gloomy, dull, almost colourless, and not at all effective; the medium register, *f*, is sharp and hard, but *p* is fresh, biting and clear; the high register is, *f*, sharp and shrill, but *p*, is milder yet always penetrating. The upper notes of the high register are difficult to produce *pp*. The tone colour of the above three registers depends greatly upon the individual handling of the instrument. The piccolo should be used with great care, for injudicious or too frequent use makes it sound common and vulgar. For the manner of using the piccolo see Ex. in score, pt. III, pts. V, VI, VII.

The small D-flat Flute,*)

also called 'ninth flute', transposes the written note a ninth upwards, as the following table shows



Its characteristic tone and technique are the same as of the piccolo. The instrument is only found in military bands, where it occupies the same place as the piccolo in the concert orchestra, though it is used more frequently, especially in marches. Occasionally for a special purpose — as rendering easier a passage in which many flats occur — it may be found in a concert-orchestra. Spohr uses it in the overture to *Jessonda* (see score Ex. pts. 4 and 6) and Schumann in 'Paradise and the Peri'.

*) Sometimes, but erroneously, called the *E*-flat flute from its lowest tone.

The little E-flat Flute

transposes the written notes a minor tenth higher, thus:

Real sound.

Notation.

With all chromatic intervals.

It is technically the same as the piccolo, though even sharper in tone. It is not used in concert or theatre orchestras, but is sometimes found in military bands.

The flûte d'Amour.

This transposing flute has quite disappeared. Notes written sounded a minor third deeper as shown in the following example with all the chromatic intervals.

Notation.

Sound.

With all chromatic intervals.

Its tone is said to have been tender and full.

The Flageolet

is a remnant of the old flute à-bec. In shape it resembles a flute but is held away from the body like the oboe. The tone is easily produced, for the instrument is fitted with a mouth-piece resembling that on a child's whistle. It is a transposing instrument, and has a compass of two octaves from

With all chromatic intervals.

Its actual sound is a fifth higher than the written notes; and its tone is pleasant and sympathetic. Gluck has used the flageolet in *Die Pilgrime v. Mecca*, and Mozart in *Il Seraglio*. It may be found, too, in Handel's scores.

The Czakan,

a flute made of cane or bamboo, is shaped like a reduced walking stick. The tone is produced by means of a mouth-piece and throughout is pleasant and gentle. It has seven holes and 1 or 2 keys; and is held like a clarinet. It transposes written notes a minor 6th upwards, and its compass extends through two octaves thus:

With all chromatic intervals.

. Das Instrument wird in Oesterreich und Ungarn viel von Dilettanten gespielt. In Austria and Hungary it is often played by amateurs. Lumbye has used it in his fantasia 'Traumbilder' with great skill, thus:

2nd Tempo. Moderato.

Czakan in A-flat.

Violini & Viola.

Violoncello & Contrabasso.

2 Fl.

Contrb. pizz.

Veil. arco pp

bass.-solo.

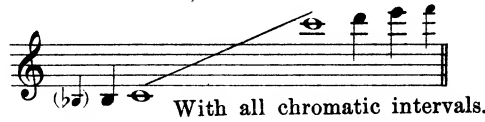
pizz.

Lumbye. Traumbilder-Phantasie. (By permission of Breitkopf & Härtel, Leipzig.)

*) Also, but erroneously called F-flute, from its lowest note.

The Oboe (or Hautboy.)

In appearance the oboe resembles the clarinet, has a conical bore, holes and keys, and is played by means of a mouth-piece with a double reed. It is one of the most individual of instruments because of its characteristic tone-colour, and should be used with discretion. It is written for in the violin (*G*) clef, and is not a transposing instrument. Its compass is



The low *B-flat*

is possible on some oboes of French construction, but as these are rare, the note should not be used. All notes in the compass except the low *b*, *c*, *c*[♯], *d*, *d*[♯], and the high *c*[♯] and four following notes are possible in all shades of tone, and when sustained, with all kinds of expression.



Rhythmic figures, diatonic

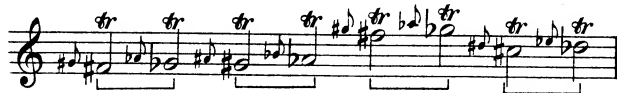
and chromatic passages are playable with every kind of phrasing as in the case of the violin. Staccato notes often repeated and passages of notes requiring long breath are often difficult. All keys may be used, but rapid *bravura* passages are easier in keys having 2—3 flats or sharps only. Ornaments and shakes are playable within



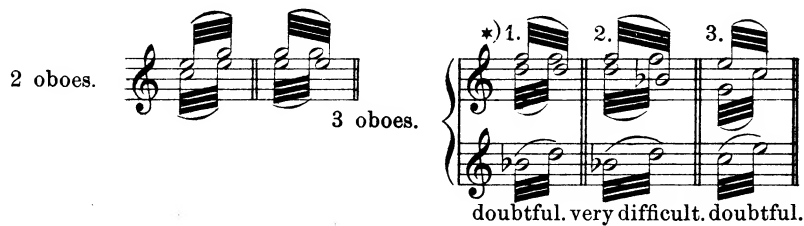
this compass:

But shakes and undulating tremolo on two adjacent notes are always

difficult, and often impossible. Thus:



In orchestral music the oboe is seldom used higher than *d* in alto, although exceptions are found, for example in the works of Haydn and Beethoven, who have written the *E-flat* and *F* respectively. These notes are very difficult to produce in tune when they have to be attacked freely, but this difficulty vanishes to some extent when the notes are led up to in a scale. In a *f* or *ff* passage in orchestral music the oboe may be used without any special regard for its characteristic tone. The undulating tremolo can be played as on the flute (*q. v.*); it is not however used for one instrument alone, but for two or more of the wood-wind in combination. Two or three oboes can execute this tremolo thus, but is not very effective when played by them. Still, it may be used for a special purpose:



doubtful. very difficult. doubtful.

The oboist requires no great breath for his instrument; he can sustain a note for a considerable length of time, and play long scales and passages without taking breath. In fact since the mouth-piece is so small but little air can pass through it, and the player is often compelled to inhale his breath before the supply in his lungs is exhausted. This sometimes causes the mouth-piece (which in performance is firmly pressed by the lips) to quit its normal position, and thereby to give rise to insecurity in playing. To avoid this the oboe should not be used immoderately or made to sustain a passage for too long a time.

How far this is correct may be seen in the plentiful examples in which the oboe has a part. The following examples show the use that can be made of the oboe as a concert (solo) instrument; for its use in the orchestra in all its capacities, see Exs. in score.

*) 1. Defective because the fundamental is omitted. 2. Difficult because of the combination of 5ths. 3. Defective because the 5th is omitted.

8 Ferling, Oboe Concerto.

Recit. Andante.

Allegro moderato.

Allegro. *a tempo*

Barth, Oboe Concerto.

Although the tone of the oboe itself is thoroughly individual, yet the varieties of its tone in the different registers are not so many-coloured as with the other instruments. Nevertheless these registers are to some extent of different tone-colours thus:

Here, too, are the different registers. In the deeper position the tone, *f*, is hard, sharp, obtrusive as it were, and very pungent, while, *p*, these defects are rendered milder. The medium register is, *f*, powerful, prominent and expressive, and *p*, tender, even noble and moving. The higher register is sharp, almost shrill, and though not full, is of use because of its peculiar colour. The highest register, as was stated above, is difficult to produce, and therefore to be used only with care.

The oboe is generally used to express lamentation, peace and happiness, tenderness, something child-like and in droll and country scenes, as the following examples show:

Haydn, 'Leasons'.

Cock crowing.

Beethoven, 'Pastoral symphony'.

The quail's call. *)

Weber, 'Oberon'. Hastiges hereinlaufen Fatime's.

Agitato.

Wagner, 'Siegfried'. „Nun kam ich zum klaren Bach.“

Gluck, 'Iphigenia'.

Wagner, 'Lohengrin'. Act II.

Sad.

Weber, 'Der Freischütz'.

Beethoven, 'Pastoral symphony'.

Country happiness.

Rossini, 'Tell'. Act I. Happiness.

*) See Haydn's 'Creation' where a similar figure is scored for 2 oboes playing the octave *g*, *g*.



Meyerbeer, 'Robert le diable', Act II, Ballet.



Mendelssohn, 'A Midsummer Night's Dream'.

Zettel's Elfs.



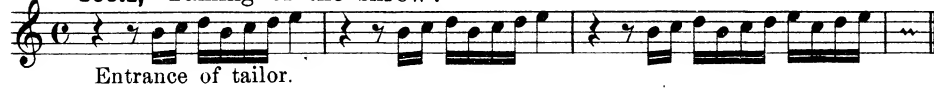
Comic.

Nicolai, 'Merry Wives of Windsor', Act II, Finale.



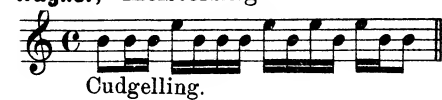
Falstaff's trembling.

Goetz, 'Taming of the shrew'.



Entrance of tailor.

Wagner, 'Meistersinger'.



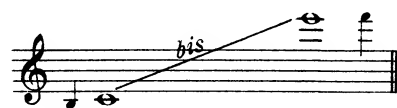
Cudgelling.

For the use of the oboe as a solo instrument, see Exs. in score — pt. III.

The English Horn (Corno inglese)

is an off-shoot from the oboe di caccia, which, once made bent or bowed, is now made straight and of similar construction to the oboe. It is written for in the violin clef, and transposes music a fifth below the written

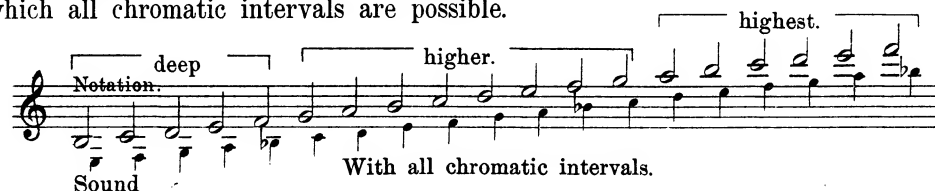
notes; and its compass is the same as that of the oboe, viz:



The different

With all chromatic intervals.

registers are less contrasted than those of the oboe because of the generally melancholy, veiled, dreamy, quality of tone of the English horn. The following is a table of the manner of writing for and actual sound of this instrument, upon which all chromatic intervals are possible.



With all chromatic intervals.

The deep register, *f*, is gloomy, almost rough, *p*, dull and dead; the middle, *f*, is rather more powerful and pleasant; *p*, doleful and wailing; the higher resembles the medium register of the oboe, but lacks its expressiveness. Nevertheless it is gentle and rather melancholy. The technique is similar to that of the oboe, but the English-horn is for less utilised, for its characteristic tone is not very suitable for the performance of passage-work. The following are examples of good use of the English-horn, and more may be found in the score-examples later in the volume; and in pts. III, IV and V.

Schumann, 'Manfred'.

Moderato.

Corno inglese.



Allegro.



mf das 2. Mal pp

Meyerbeer, 'Robert le diable'. Act IV „Robert mein Geliebter.“

Corno inglese.



Arpa.

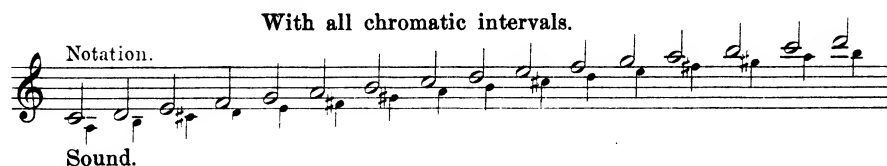
*) In former days music for the English-horn was written in the mezzo soprano and bass-clefs, thus: old French



These, however, are no longer used.

The Oboe d'Amore

was a kind of mezzosoprano oboe, though it was larger, deeper in pitch and its tone was different and fuller. It had a hollow globular bell, whereby the tone was more veiled and pathetic than that of the ordinary oboe. Its compass exceeded two 8^{ves}. It stands a minor third lower than the oboe, as a reference to the table will show.



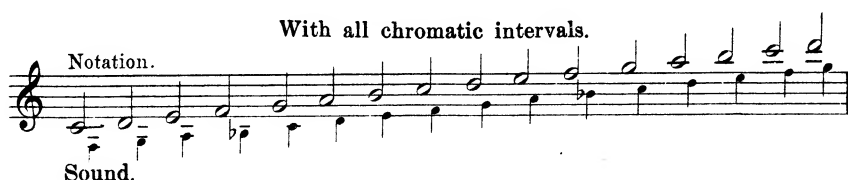
It is frequently found in Bach's works, and usually in sharp keys.

Cf. The Church Cantata No. 8: Matthew Passion.

" " " Magnificat in *D*, and Christmas Oratorio.

The Oboe di Caccia

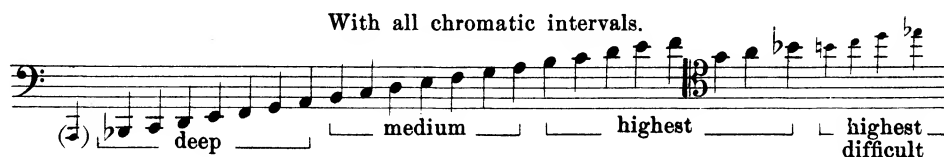
resembled the English-horn, standing in *F*, but constructed less completely. Its compass extends from



Its use may be seen in Bach's Christmas Oratorio, opening of Pt. 1 where 2 oboes d'amore and 2 di caccia are combined with the strings.

The Bassoon


is of wood, hollow and conical, with an almost insignificant bell. The tube proper is formed by two tubes bound together for the sake of easier handling, and has holes and keys. At the bell end is a thin bent metal reed (called *S*) upon which the mouth piece (a double reed) is used. Music is written for it usually in the bass clef, though the tenor clef is used for the higher notes. Where this should begin cannot be precisely specified, since its use depends (as was the case with the violoncello) upon whether the music becomes thereby easier or not to read. Its compass exceeds three 8^{ves} thus



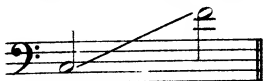
There are said to be bassoons in existence upon which the lowest *a* is playable. Although Wagner has written it repeatedly for the 3rd bassoon in his *Ring des Nibelungen*, it is better to avoid the note.*) To many the tone of the bassoon conveys any impression rather than that of power, passion, nobility or energy, yet it is not so bad as many musicians imagine. Its expression, if rather melancholy, is adopted to almost all kinds of music without being either too brilliant or disturbing by undue prominence. In spite of the apparent one-sidedness of the bassoon it is in the orchestra especially of great and characteristic importance. Many efforts have been made to depose it from its high place, but these have all failed. It (modest, like a sympathetic, good being) possesses the power of vindicating itself and of rendering itself indispensable despite its unassuming nature. Its supposed uselessness is, moreover, not so overpowering as many have declared, since many of the greatest masters have used it lovingly. Study the scores of Haydn, Mozart, Beethoven and Weber, and you will be astonished

*) In the scores Wagner expressly states that if the bassoon is not adapted to play this *A*, a double-bassoon (contra-fagott) must be used.

at the wonderful effects to be produced by the 'modesty' of this instrument! Very often the bassoon is the vehicle for musical humour.

Every note from the low *E* and *F* to the high *F* and *G* can be played in every grade of tone from *pp* to *ff*, and sustained during a *crescendo* or *diminuendo*. The lower notes are easy when played *f* or *ff*, but more difficult *p* and *pp*; *cresc.* and *dim.* however, they are quite possible. Above  a very emphatic *cresc.* to

f or vice versa is not so effective. All kinds of scales and passages are possible in moderately rapid *tempo*, especially in keys having only 3 or 4 sharps or flats; but in more remote keys they become more difficult. All ornaments, too, are easy when neither very high nor very low. The best register for shakes, tremolo (rapid changes of 2^{nds}, 3^{rds} and so on) is that from



The following shakes are playable, but not very effective.



Lower than this they are unplayable thus:



The following examples show the use that can be made of the bassoon as a concert instrument: for its use in the orchestra, see the numerous examples in score in pts. 3, 4, 5, 6 and 7.

Weber, Concerto in *F* for bassoon.

Allegro ma non troppo.



RONDO.

Allegro.



The tone of the various registers of the bassoon may be divided thus. The deep register, *f*, is coarse, raw, thick but full: *p* rather milder, but still coarse. It is difficult to play *pp* in the deepest registers. The medium register is, *f*, powerful and pleasant, but not striking; *p*, it is almost tender and rather dull. The high register is, *f*, somewhat similar to that of the violoncello (in the same register) but not so prominent, and thinner, almost piteous and elegiac: *p*, it is moving and complaining. The highest tones sound thin, dull and spiritless, and are never used in the orchestra. These characteristics are unnoticeable in rapid passages, and it is impossible to say precisely where one register ceases and the next begins since much depends upon the player. Here follow a few examples of its use in the orchestra: as a solo instrument see score examples in pts. III and V.

1. Beethoven, B-flat symphony. 1st movement.

Adagio. Solo. *pp*

Fagotto I.

Violini & Viola.

9 bars later this passage recurs a semi-tone higher.

2. 1st movement.

Allegro. Solo. *p*

Fagotto I.

3. 4th movement.

Solo. *p* pizz. *p*

Fag. I.

Violini. Viola. Violo.

4. Beethoven, C-mi symphony. 2nd movement.

Più mosso. Solo. *pp* dolce

Fag. I.

Viol. & Viola.

Violo. & Contrab.

5. Beethoven, Violin concerto. 3rd movement.

Allegro. *p dolce* *dolce* *pizz.* *p* arco

Fagotto I.

Violini & Viola.

Violoncello & Contrabasso.

8 bars later the 1 bassoon reappears and plays the melody of the 1st Violin.

6. Weber, Euryanthe, Act III.

Largo. *a piacere*

Fagotti.

7. Beethoven, Choral fantasia.

Allegro moderato.

Oboi. *dolce*

Fagotti. *dolce*

8. Beethoven, Symphony.

Presto.

Oboi & Clarinetti.

Fagotti. *p*

9. Mendelssohn, 'A Midsummer Night's Dream'.

Fagotti. *mf*

Violoncello.

10. Meyerbeer, 'Roberto', Act III — resurrection of the nuns.

Andante sostenuto.

Nonnen.

Fagotti. *p e stacc.*

11. Lumbye, Traumbilder, fantasia — last 5 bars.

Allegretto. 1. Tempo letzten 5. Takte.

Fagotto. *p*

Violini & Viola.

Violoncello Bass.

Contrabasso.

Vell. *e.*

See also Beethoven's 5th and 8th.
Symphonies (3rd and 1st movements)
and Brahms's violin concerto.

The Double Bassoon (contrafagotto)

is often described in books as 'vanished', but this is not true since it is found in every large German orchestra. It would be a matter for deep regret, moreover, if it were allowed to disappear, since no other known wood-wind instrument could replace it. It is a bassoon of larger proportions, and differs only from it in the bell. The Belgian double-bassoon, it may be stated, is made entirely of metal. In the wood-wind family the double-bassoon takes the same place as that occupied by the double-bass in the string-family. It takes the 16-foot bass of the wood-wind, and is to the ordinary bassoon as the double-bass to the violoncello, in that the notes sound an octave lower than they are written. Music is written for it always in the bass clef, thus:

With all chromatic intervals.

Notation.

Real sound.

In days gone by the compass extended only from *D*, but now the *C* has been added, and there are double-bassoons upon which the *B* exists, but for practical purposes this should be ignored. The tone is generally speaking raw, hard and, at best, but moderate; the two deepest notes speak with difficulty and are not easy to differentiate owing to their deep pitch. It is hardly possible, moreover, for the player to produce the deeper register *p*; it should only be used where heavy scoring is required. As the instrument is difficult both to handle and to blow, rapid passages are to be avoided. It must always be borne in mind that it is one of the deepest pitched instruments, and requires great power of breath because of the size of its body and mouth-piece, wherefore it should not be used in long, exacting passages. The newest construction of this instrument has done away with many irregularities in its technique, and it is now easier to handle, so that scales and figures can be played when not in too rapid a *tempo*. Ornaments etc. on this instrument are seldom or never used. A fine effect is the doubling by the double-bassoon of the deeper bass notes in orchestral music by using its deep or medium register: the higher is not often used.

The following examples show the use that can be made of the double-bassoon.

Haydn , Creation.	Beethoven , Symphony in Cmi.	Brahms , Haydn-Variations.
" Seasons.	" " in Dmi.	" Cmi symphony.
Mozart , Idomeneo.	" The Dma mass.	Wagner , Parsifal.
" Serenade for 13 wood- wind-instruments.	" 'The Ruins of Athens'.	See parts VI and VII.
	" Fidelio, Act II.	

The Sarrusophone

is a metal instrument resembling the bassoon or tenor-horn in form, with many keys, and is played by means of an oboe or bassoon mouth-piece (double reed) according to its size. There were eight varieties of sarrusophones, small and ordinary soprano (like the oboe) alto, tenor, bass and double-bass (like a bassoon), the last tuned in two different ways. The character of its tone resembled (according to the register) the oboe, English-horn and bassoon, but the tone was stronger and sharper (more metallic), and its handling was similar to that of the oboe, clarinet and bassoon. The following table shows its compass etc.

Notation.

Real sound.

Small Sopran-Sarrusophon in E-flat.

Soprano-Sarrusophon in B-flat.

Alto-Sarrusophon in E-flat.

Tenor-Sarrusophon in B-flat.

Baritone-Sarrusophon in E-flat.

Bass-Sarrusophon in B-flat.

Contrabass-Sarrusophon in E-flat.

Contrabass-Sarrusophon in C.

Contrabass-Sarrusophon in B-flat.

With all chromatic intervals. The sarrusophone is found in some French military bands.

The Clarinets

belong to the 'tongue instruments' and have a totally different tone-colour from that of the other double reed wood-wind instruments already described. They are a large family in themselves and occupy a very important position as the many-sidedness of their technique and tone colour lends itself to a great variety of uses. They are of wood, similar in shape to the oboe, with holes and keys, and are played by means of a single reed mouth piece. The body is a cylindrical tube terminating in a bell. It is written for in the *G* (violin) clef, though occasionally for the deepest notes the bass clef is used. This occurs, however, only for the convenience of the composer or to save space when the lines on the score-paper are too close to admit of leger lines. Mozart and Wagner have both used the bass clef for deep notes. The compass of the clarinet is $3\frac{1}{2}$ octaves, thus:

With all chromatic intervals.

Clarinets are pitched in various keys, *A*, *B-flat*, *B \sharp* , *C*, *D*, *E-flat*, (*F*), (*G*) and *A-flat*, all of which have the afore-said compass, and all, except that in *C*, are transposing instruments. Those generally used are: in theatre and concert orchestras, clarinets in *A*, *B \flat* and *C*; in dance orchestras, *A*, *C*, *D* and also *B \flat* ; and in military bands, in *B \flat* , *E \flat* and *A \flat* , the *F* and *G* clarinets were common formerly in military bands, and the *B \sharp* clarinet (which now is probably unknown) was used by Mozart in *Idomeneo* and *Così fan Tutte* in passages wherein were many sharps, that they might be simpler for the player.

The following is a table of the actual sounds of the clarinets now in use.

The *A*-Clarinet sounds a minor third lower than it is written for, the *B \flat* -Clarinet sounds a tone lower than it is written for, the *C*-Clarinet sounds as written, the *D*-Clarinet sounds a tone higher, the *E \flat* -Clarinet sounds a minor third lower, the *F*-Clarinet sounds a fourth lower, the *A \flat* sounds a minor 6th lower.

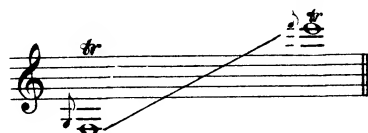
Notation. Sound.

Clarinet in A. in B \flat . in C.

With all intervals.

in D. in E \flat . in F. in A \flat .

Every note, except those in the highest position (*f* etc.) can be played in all grades of tone from *pp* to *ff*, those excepted being only effective *f* or *ff*; and both sustained notes and long passages, sustained or played in rapid succession can be rendered with a *crescendo* from *pp* to *ff* and *decrescendo* from *ff* to *pp*. Diatonic, chromatic passages and passages of chords in all varieties of rhythm are playable staccato or legato or both, though the rapid repetition of the same note and dotted rhythmic figures are more difficult on the clarinet. Every player can use all instruments, whatsoever the pitch, and play in any key. But since keys with more than 2 or 3 sharps or flats offer some difficulties in rapid *tempo*, it is better to use clarinets according to their pitch, in order to avoid such difficulties. Thus for sharp keys the *A*-Clarinet, and for flat keys the *B \flat* -clarinet are best, but more of this later. Ornaments of all sorts, such as shakes are playable upon almost any note except those at the extremes of the compass. The most profitable register, however, is



shakes on these notes are difficult:



The tremolo formed by the rapid repetition of seconds, thirds and 4^{ths}, is playable as on the other wood-wind, but of course only upon several instruments; and in a register that is not too high. Again care should be exercised to avoid intervals greater than a 4th. A tremolo in which the interval of a 2nd occurs, is not particularly effective when either of the notes is one upon which a shake is difficult. The tremolo may be used by clarinets alone or in combination with other wood-wind instruments.

The following examples show how the clarinet may be used as a concert-instrument. In the orchestra its capabilities are very rarely exhausted. In the following examples it may be seen how the clarinet can be used for all kinds of purposes.

Weber, Concertino for Clarinet.

Adagio ma non troppo.

Andante.

* NB. The notes from *f* are only good *f* or *ff*.

Weber, Concerto in $E\flat$ -Clarinet, No. 2.

Allegro.

Cf. also concertos by Spohr, Rietz and others.

The various clarinets already mentioned may be divided into two classes, according to whether they are high or low pitched; these again differ from each other in the variety of their tone colour. The clarinets which will be used later in our exercises are those in A , $B\flat$ and C (low pitch), whose tone-colour is in each case individual. That of the clarinet in A is mellow, in B noble and more brilliant, and of C both harder and sharper. The tone of the higher clarinets in D , $E\flat$ and $A\flat$ will be described later. The compass of the clarinets in A , $B\flat$ and C may be divided into the following four registers

In the deep register the tone, *f*, is dark, thick and full; *p*, it is dull yet mellow, elegiac and mysterious; the medium register is, *f*, coarse, veiled yet full, and *p*, on the other hand, it is feeble and hollow; the high register, *f*, is bright, noble and powerful, *p* it is tender and pleasing: the highest is, *f*, shrill and penetrating, and *p*, thin and sharp. The tone-colour of these registers is modified somewhat when the clarinet is in *A* and not in *B♭*, but with the *C*-clarinet it is both harder and sharper. In rapid passages the difference between the registers is hardly noticeable, for the various tone-colours blend together. The deeper notes are useful to portray fear or tragic passion and for *spirituel* effects: the medium and high registers to express gentler, more pathetic emotion, and also joy and happiness. The notes of the highest register are used but very rarely in the orchestra; they are more often met with in concert-pieces or *bravura* passages where their effect is good. Even here, however, they must be used with discretion.

The following familiar examples show the use of the various registers and pitch for different effects.

Neber, 'Oberon' overture.

Allegro.

Solo.

Clarinetto I in A. *p dolce*

Mendelssohn, Finale of A-mi. symphony.

Allegro.

Clarinetto I in A.

Weber, 'Freischütz' overture.

Molto vivace.

Clarinetto I in B. *ff*

Meyerbeer, 'Les Huguenots', Act IV.

Clarinetto I in B. *p espress.*

Wagner, 'Tannhäuser' overture.

Clarinetto I in A. *p*

Beethoven, 8th Symphony. Minuet trio.

Clarinetto I in B. *p dolce* difficult and dangerous in performance. a few bars later *p dolce* *p* *cresc.* *p*

Mozart, Clarinet Quintet.

Larghetto.

Clarinetto I in A.

Weber, Concertino (op. 26) for Clarinet.

Lento.

Clarinetto I in B. *f* *sf*

Mozart, E♭ symphony. Es-dur.

Allegretto.

Clarinetto I in B. *p*

For the use of the clarinet as solo instrument, see Exs. in score, pts. III and IV.

Table

to show at a glance how to choose a suitable instrument. In our work the high clarinets in $E\flat$, F and $A\flat$ are ignored.

The next list shows the clarinets used by various masters in their works:

Beethoven, Symphony in $B\flat$ 2 Clar. in $B\flat$.
 " " " C 2 " " C .
 " " " F 2 " " $B\flat$.
 " " " A 2 " " A .
 " " " D 2 " " A .
 " " " D -mi 2 " " $B\flat$ (2nd mov.)
 " " " D -mi 2 " " C (3rd mov.), in
 " " " C -mi 2 Clar. in $B\flat$ and later
 2 in C .
 " **Egmont-Overture** in E , 2 Clar. in A .

Schumann, C -major symphony, 2 Clar. in $B\flat$.
 " 'Manfred' Overture, $E\flat$, 2 Clar. in $B\flat$.
 " **Genoveva**, C -mi, 2 Clar. in $B\flat$.
Mozart, Overture. 'Don Giovanni', D , 2 Clar. in A .
 " 'Magic Flute', $E\flat$, 2 Clar. in $B\flat$.
Frz. Schubert, Unfinished symphony, 2 Clar. in A .
 " " " C -moll, 2 Clar. in A .
Cherubini, 'Les deux Journées', Overt. $E\flat$, 2 Clar. in C .
 " 'Anacreon', D , 2 Clar. in C .
Weber, 'Freischütz', C -mi, 2 Clar. in $B\flat$.

Many of the older Italian and French composers, as Cherubini, Spontini, Méhul, wrote clarinet parts always in C as for non-transposing instruments, (whether to save themselves trouble or for some other reason cannot as determined), leaving the choice of instrument to the player. This system no longer obtains, and in the present day clarinetists try, when possible, to use the $B\flat$ clarinet only for all keys. Against this the conductor should strongly protest.

The small (or high) clarinets in D , $E\flat$, F and A ,

have the same compass as the others; but as these are rarely used for any other purpose than that of playing the melody, the whole of their compass is seldom required. Technically they are capable of the same work as those in A , $B\flat$ and C ; they can execute ornaments, shakes and tremolos. Their tone-colour is bright and sharp generally speaking; and it differs from that already described in the various registers. Their compass and registers are as follows:

The deep register sounds, both p and f , rough and dull; the medium is colourless and feeble but improves somewhat with the last 3 notes; the high register is bright, sharp and penetrating; the highest register, difficult to play p , is more effective f , but still is shrill and pungent. As in our subsequent work the $E\flat$ and $A\flat$ clarinets will not be used, so that in D may be particularly noticed; it is frequently used in dance music with that in A (a 2) to play the melody or for decorative purposes, and by reason of its sharp tone in the high register it can produce a very piquant, droll or pointed effect.

Cf. also part VII. Clar. in D and $E\flat$.

The Alto Clarinet

is in construction and capacity similar to those already described, and differs from them only in its greeter size, deeper pitch and tone. Music for it is written in the violin clef, and the alto clarinet is a transposing instrument. It is found in *F* and *E \flat* , the former transposing a 5th below, and the latter a 6th, as will be seen from the following example.

Notation. Alto-Clarinet in *F*. in *E \flat* .

Sound.

The alto clarinet is only used in other lands than Germany in military bands.

The Basset-horn (Corno di Bassetto).

is in fact a large clarinet like that just described, and although Mozart has frequently used it, singly and doubly, it has now quite vanished from the orchestra. Originally it was curved in form, but later it became straight with a bell turned upwards like the bow of a tobacco-pipe. Music was written for it in the violin clef (though for the deeper notes Mozart used the bass clef, the notes sounding an 8^{ve} higher than they were written) and sounded a 5th deeper, as the instrument was in *F*. The compass was deeper than that of the clarinet as the following table shows:

Notation. With all chromatic intervals.

Sound.

Its tone, in the deep register was fuller and softer than that of the *A* and *B \flat* clarinets, though that of the medium and high registers was similar. The method of handling it, too, was the same. For use of the basset-horn see score Exs. pt. III.

The Bass-Clarinet

the largest and deepest-toned of the clarinet family is designed particularly to increase the range of the clarinets downwards, and thus it forms the bass of the family. Its deep pitch differentiates it entirely (so far as concerns the registers) from the other clarinets. It is found in 3 keys, *A*, *B \flat* and *C*, that in *B \flat* being the more generally used. Music is written for it in both the bass and violin clefs. The bass-clarinet in *C* sounds as written when the bass clef is used, but when the violin clef appears, the sound is an 8^{ve} lower. That in *B \flat* in the bass clef transposes a major 2nd, and in the violin clef, a 9th lower; while that in *A* in the bass clef transposes a minor 3rd, and in the violin clef a 10th lower. The following examples show the method of writing and the actual notes sounded as well as the compass of this instrument.

Bass-Clarinet in *C*.

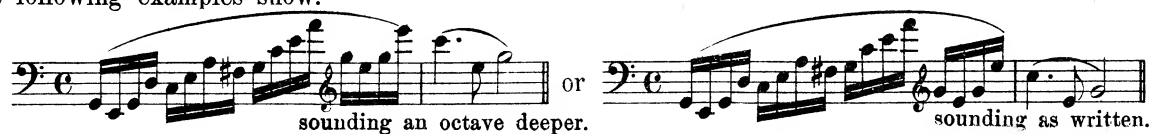
In the Violin-clef. deep medium high highest pos.

In the Bass and Violin-clef. With all chromatic intervals.

Actual Sound.

Bass-Clar. in *B*. Bass-Clar. in *A*.

Occasionally passages which draws upon the three registers are written in two different ways in the violin clef as the following examples show.



In order to avoid these different methods, it is advisable to write for the bass-clarinet only in the violin clef; the foregoing example would then appear thus:



The bass clef

may be easier to read in the score, but it is more difficult for the player to read. The technical capacity of the bass-clarinet is similar to that of the clarinets in *A*, *B₂* and *C*. Its tone in the deep and middle registers is, (*f*) thick, dark, unearthly; (*p*) full, mellow, gloomy, wherefore these are more used than the others for characteristic effects. The two higher registers are like the medium and high registers of the *A* and *B₂* clarinets. As to the effect, note the following examples:

Meyerbeer, 'Les Huguenots'.
Molto maestoso. ($\text{♩} = 63$.)

Clarinetto basso in B. *p cantabile* *cresc.* *rall.* *f* *pp*

Wagner, 'Lohengrin'. Act II; and Walküre (p. 24 of full score).

Clarinetto basso. Ortrud: "Konntest du erfassen" Clarinetto basso Solo. *p*

See also score-examples in pts. II, III, IV and V.

The Saxophone

is a kind of clarinet made from metal with a bell turned upwards like that of the basset-horn. The two higher pitched (little) saxophones are an exception to this rule, since they resemble in form and size the *E₂* and *B₂* clarinets. They have a number of keys and are played by means of a clarinet-mouthpiece. There are 6 kinds of saxophones: small soprano, soprano, alto, tenor, baritone and bass, each of which exists in two different pitches. Music for one and all is written in the violin clef, and all saxophones except that in *C* are transposing instruments. The following table shows the compass etc.

	Small Soprano-Saxophon in F.	Soprano-Saxophon in C.	Alto-Saxophon in F.	Tenor-Saxophon in C.	Baritone-Saxophon in F.	Bass-Saxophon in C.
Notation.						
Sound.						

	Small Soprano-Saxophon in E _b .	Soprano-Saxophon in B _b .	Alto-Saxophon in E _b .	Tenor-Saxophon in B _b .	Baritone-Saxophon in E _b .	Bass-Saxophon in B _b .
Notation.						
Sound.						

The compass of all these instruments includes all the chromatic intervals.

The above-mentioned mouthpiece gives to the saxophones more or less a clarinet tone, which, however, lacks the brilliancy of the deeper clarinets (*A*, *B₂*, *C*); this is especially the case with the small soprano and

alto saxophones. Those of deeper pitch, as the tenor, baritone and bass saxophones, rather resemble in tone the alto and bass clarinets. The technique is the same as that of the clarinets and basset-horn. In France, Belgium, Italy and America saxophones in $E\flat$ and $B\flat$ are used in military bands — and these in F and C occur very occasionally in theatre and concert orchestras; but in Germany they are not found. Ambroise Thomas has used an $E\flat$ in Saxophone *Hamlet*.

In some larger modern compositions the wood-wind is doubled or trebled, thus: In the Wagner music-dramas 3 flutes, 3 oboes (and English horn), 3 clarinets (with bass clarinet), 2 and 3 bassoons, or 2 bassoons and a double bassoon. But in the usual concert orchestra are generally 2 flutes, 2 oboes, 2 clarinets and 2 bassoons, with, as occasion requires, an English horn, a bass-clarinet or a double-bassoon. In smaller orchestras 1 or 2 flutes, 1 or 2 oboes, 2 clarinets and 1 or 2 bassoons are usual, but in dance-bands one each of the oboes and bassoons is generally missing.

These instruments are written thus in the score: 1) If there are 2 flutes, one or two lines may be used according to the ease in reading. 2) When there are 1 large flute and a piccolo, the part for the former is written at the top, the latter beneath. 3) When there are 3 large flutes 1 has the upper line; flutes II and III are then written in the 2nd line. 4) Two large flutes and a piccolo on 2 or 3 lines.

Oboe parts are always written on one line immediately and invariably after the flutes, followed by the English horn or alto-oboe, the clarinets, (which, when pitched in the same key, as is usual, are written on one line); then the bass-clarinet. In dance-music it often happens that clarinets in both D and A are used in the same piece, two separate lines of course being used. After the clarinets come the bassoons on one line, and next the double-bassoon.

When the wood-wind has been properly arranged in the score, the other instruments follow in a defined order according to which instruments happen to be present in the particular orchestra. The following combinations show the tone-colour of these instruments when playing together. In slow or moderately rapid lengthy passages played by several instruments, f , mf or even p , the striking contrast between the different registers disappears. *The pupil is urgently besought to hear constantly the entire compass of all these instruments so often as the opportunity presents itself, for only thus can he obtain a thoroughly knowledge of their distinctive tone-colours.*

The musical exercises are arranged in four groups, each with a specific dynamic and articulation marking. The instruments involved are Flutes, Oboes, Clarinets (in Bb, A, and C), and Bassoons.

- Group 1 (Top Left):** Flutes (top), Clarinets in Bb (bottom). Dynamics: f rough, hollow; p gloomy, dull. Articulation: to .
- Group 2 (Top Right):** Oboi (top), Bassoons (bottom). Dynamics: f brighter, clearer; p mild, weak. Articulation: to .
- Group 3 (Bottom Left):** Oboi (top), Clarinets in C (bottom). Dynamics: f bright, gay; p soft, clear. Articulation: to .
- Group 4 (Bottom Right):** Clarinets in A (top), Bassoons (bottom). Dynamics: f full, sharp, rough; p dull, oboi rather hard. Articulation: to .

Additional markings for the exercises include: f rough, coarse; p hard; f sharp; p mild; f penetrating; p mild and tender; f rather sharp; p dull, mild; f bright, sharp; p soft, thin; f rough; p gloomy; f hard; p tender; f clear; p sharp and clear.

Of course if any of these instruments play alone their different characteristic of tone are more noticeable than when several wood-wind instruments are played together. In this latter case they combine better, since in the character of their tone they stand closely related in many ways to each other. Flutes and clarinets combine best together because of the similarity of their tone. The oboes, on the other hand, stand out far more prominently than the mild-toned flutes and clarinets when playing together, this, however, being less marked when the oboes and bassoons are combined. The bassoons in the middle and high registers combine well with flutes and clarinets in close harmony; but the oboe offers a contrast in its lower register to the milder sounding instruments in the same register. Its middle and high register combines better with the other wood-wind. The English horn is easier to combine in all its registers with the mild-toned wood-wind because of its somewhat veiled colour — a remark which applies to the bass-clarinet, basset horn and double-bassoon.

The contrast of the wood-wind itself depends upon the compass and character of tone of the several instruments apart altogether from the tone-colour of the various registers of the compass of each individual instruments. Very ecined contrasts are obtained by the rapid transit from high to low tones and the reverse as well as by the sudden change from p to f ; by the use of legato or staccato, varied rhythm and accompaniment, and by tremolo. All these may be seen in the following exercises and in the examples in score.

In Part I we spoke of the use of dissonant passing and changing notes in the strings. These, too, may occur in the wood-wind, but the varied tone-colour of each separate instrument must be more carefully considered than was necessary in the case of the strings. In orchestral works wherein all the wood-wind is used, passages in which dissonant passing and changing notes occur are not very common; and when wood-wind is not numerous the effect is not good when the wood-wind alone is playing. Study the following examples for their use.

The use and combination of wood-wind as an independent body in the orchestra.

1. J. Haydn. Creation, pt. III. I. No 27.

Largo.

Flauto I.

Flauto II & III.

Cf. also Liszt 'St. Elizabeth' (introduction, 3 flutes).

2. J. Haydn. Symphony in G. (No. 9. 'Oxford'). 4th movement.

Presto. Solo.

Flauto I.

Oboi.

3. J. Haydn. Symphony in G. (No. 7. 'Military'). 1st movement.

Allegro.

Flauto I.

Oboi.

4. J. Haydn. Symphony in D. (No. 1. Peters.) 1st movement.

Allegro.

Flauto I.

Oboi.

5. J. Haydn. Symphony in D. (No. 1. Peters.) 4th movement.

Allegro spirito.

Flauto I.

Oboi.

6. Beethoven. Symphony in A, 3rd movement.

Presto.

Flauto I.

Oboi.

Flauto I & II.
Flauto III.
Oboi.

8. R. Wagner. 'Siegfried' (score p. 55).

Mässig.

Corno inglese.
Clarinetto III in B♭.

9. Beethoven. A-major symphony. 3rd movement.

Presto.

Flauto I.
Clarinetti in A.

10. Weber. 'Oberon'. (Act III.)

Allegro moderato.

Flauti.
Clarinetti in B♭.
Fagotti.

Un-sicht-bar voll Macht und Licht, spendend für Tugend und Liebe Glück, o sen-de dem bravsten der Rit-ter nun die Schö-nste der Schö-nen auch bald zurück.

11. Weber. 'Oberon'. (Act III, finale.)

Flauti.
Clarinetti in B♭.

12. Weber. 'Oberon'. (Overture.)

13. Weber. 'Oberon'. (Act III.)

Andante.

14. Adam. 'Le Postillon de Longjumeau'.

Moderato. introduction.

Flauti.
Clarinetti in A.
Flauti.
Clarinetti in B.
Flauti.
Clarinetti in B.

15. Liszt. 'Faust' symphony. 2nd movement. (Gretchen.)

Andante soave. p dolce

Flauti.
Clarinetti in A.*

*) B♭ Clarinets are preferable here.

16. Schubert. C-major symphony. No. 6, 1st movement.

Allegro.

Flauti.

Oboi.

Clarineti in C.

Violini.

17. Beethoven. C-mi symphony. 2nd movement.

Andante con moto.

Flauto I.

Oboe I.

Clarineti in B \flat .

Violini.

Viola.

Contrb.

p dolce

cresc.

18. R. Wagner. 'Lohengrin'. 3rd scene.

Langsam.

Oboi.

Clarinetto I in A.

Corno inglese.

Lohengrin.

pp

Leb wohl! Leb wohl, mein lieber Schwan!

19. R. Wagner. 'Siegfried'. (score, p. 41.)

Mime: Was erhofft ich Thor mir auch Dank?

Ziemlich langsam.

Fagotto I & II.

Fagotto III.

Clarinetto basso in A.

Mime.

p

Dank?

20. Weber. 'Freischütz'.

„Jetzt ist wohl ihr Fenster offen.“

Andante con moto.

Flauti.

Oboi.

Clarinetto I in B \flat .

p dolce

p

21. R. Wagner. Tannhäuser. (score, p. 399.)

Flauto I II & III.

Oboi.

Clarinetto I in B \flat .

pp

22. Beethoven. Choral Fantasia.

Allegro moderato.

Oboi.

Fagotto I.

dolce

dolce



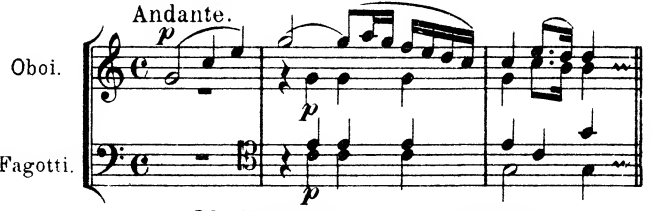
23. R. Wagner. Lohengrin. (Act II, scene 1.)

Lebhaft.



24. Mozart. 'Cosi fan Tutte', overture.

Andante.



25. Weber. Jubilee overture.
Scherzando.



26. Volkmann. D-mi symphony.
Andante.



27. Weber. Oberon. (Act III, finale.)

Recitativo.



Heil! treues Paar, vorüber Leiden es danket euer Freund euch Beiden. durch euch ward ihm des Siegs Gewinn, und neu umarmt er seine Kö-nig-in.

28. Haydn. Symphony in G. (Peters. No. 4.)



29. Mozart. Overture 'Cosi fan Tutte'

Andante.



30. J. Haydn. 'Oxford' symphony. 2nd movement.

Adagio.



31. Mozart. C-major symphony. 3rd movement.

Allegretto.



32. Haydn. Symphony in D. (Peters. No. 2.)

Andante.



33. Haydn. 'Military symphony'. 2nd movement.

Allegretto.

Oboi. *p* *dim.*

Clarineti in C. *p* *dim.*

Fagotto I. *p* *dim.*

34. Haydn. 'Military symphony'. 2nd movement.

Allegretto.

Oboi. *p*

Clarineti in C. *p*

Fagotti. *p*

35. Beethoven. Egmont overture.

(8 bars before the Allegro con brio.)

Oboe I. *ppp*

Clarineti in B \flat . *ppp*

Fagotti. *ppp*

36. Meyerbeer. Overture to 'Les Huguenots'.

By permission of Breitkopf & Härtel, Leipzig.

Poco Andante.

Corno inglese. *mf*

Clarineti in B \flat . *pp* *mf*

Fagotti. *pp* *mf*

Pauken. *pp*

Corno. *mf*

37. R. Wagner. 'Walküre'. (Score, p. 37.)

Sehr gemessen.

Oboe I. *p*

Corno inglese. *p*

Clarineti in B \flat . *p*

Clarinetto basso in B \flat . *p*

38. Meyerbeer. 'Robert le diable'. (Act III.)

Andante.

Flauti. *p*

Oboi. *p*

Clarineti in B \flat . *p*

By permission of Schlesinger, Berlin.

39. Beethoven. Choral Symphony.

Allegro ma non troppo, un poco maestoso.

Oboi. *pp*

Clarineti in B \flat . *pp*

Fagotti. *p*

a tempo

riten. a tempo

riten. a tempo

40. Beethoven. Symphony. 3rd movement.

Presto.

Oboi. *p*

Clarinetti in C. *p*

Fagotti. *p*

pstaccato

41. R. Wagner. 'Lohengrin'. (Act II.)

Langsam.

Flauto I. *p*

Oboe I. *p*

Corno inglese. *p*

Fagotto I. *p*

Ortrud. *p*

Was macht dich in so wilder Klage doch vergehn?

42. R. Wagner. 'Tannhäuser'. (Score, p. 149.)*

The shepherd plays his pipe.

Schnell und lustig.

Corno inglese on the stage. *f*

Tenor I & II. *p*

Bass I & II. *p*

Zu dir wall' ich, mein Je - sus Christ, der

rit.

ritard.

f

dimin.

du des Pil - gers Hoff - nung bist. Ge - lobt sei Jung - frau süß und

p cresc.

f

ritard.

dimin.

f

ritard.

rein! Der Wallfahrt wol - le gün - stig sein! Ach schwer drückt

*) By permission of Fürstner, Berlin.

43. Mendelssohn. 'Antigone'.

Andante.

Flauti. *pp* *sf dim.*

Clarineti in B \flat . *pp* *sf* *pp*

Fagotti. *sf dim.* *pp*

Der Chorführer: „Dort naht vom Thor Ismene sich uns.“

44. Mendelssohn. 'A Midsummer Night's dream'.

Allegro vivace.

Flauti. *p*

Clarineti in B \flat . *p*

Fagotti. *p*

45. Weber. 'Oberon'.

Allegro maestoso.

Flauti. *p dolciss.*

Clarineti in B \flat . *p dolce*

Fagotto I. *p dolce*

Oberon.

Es küsst die Son-ne den Purpur-saum der um Fe-en-lauben fließt.

46. Gounod. 'Faust'.

Andante.

Flauto I. *p dolce*

Oboe I. *p*

Clarineti in B \flat . *p*

Fagotto I. *p*

Mephisto.

doch schwer wird's halten ih-re Unschuld zu gewin-nen, da selbst der Him-mel sie be-wacht.

47. Cherubini. 'Les Abencerages'. Overture.

Largo. *dolce*

Flauti.

Oboi.

Clarineti in B \flat .

Corno.

Fagotti.

pp

48. R. Wagner. 'Meistersinger'.

In mässigem Zeitmass. (Mod.)

Str.

Oboi.

Clarineti in B \flat .

Fagotti.

Contrab.

fp

Violini.

Viola.

Vell.

Bass.

50. R. Wagner. 'Walküre'.

49. R. Wagner. 'Götterdämmerung'.

Oboi.

Clarineti in B \flat .

Fagotti.

Brünnhilde.

p

mit mir ver-lor— es die mächtige Art.

Clarinetto I in B \flat .Clarinetto II and III in B \flat .

Corno inglese.

Fagotti.

Clarinetto basso in B \flat .

p *rall.*

Corno II in B.

pp

p

pp

p

51. Volkmann. 2nd symphony (B \flat) 1st movement.*Allegro vivace.*

Flauto I.

Oboe I.

Clarineti in B \flat .

Fagotto I.

p

52. Meyerbeer, 'Prophet'.

Andante sostenuto.

Flauti.

Oboe I.
later Cor. ingl.

Clarinetto I
in B \flat .

Clarinetto
basso in B \flat .

Johann.
Johann
and Fides.

Corno inglese.

p

pp

cresc.

Johann.

Fides.

Johann.

Du liebstest diesen Sohn, dem mein Antlitz gleicht. Ob ich ihn liebte Wohl-

an! — so rich- te nun auf mich dei - nen Blick. — Mein Gott! mein Gott! Und ihr, die

53. Beethoven, C-mi symphony.

Flauto I.

Oboi.

Clarinetti
in Bb.

Fagotti.

Bass.

54. R. Wagner, 'Lohengrin'. Akt III.

Ruhig bewegt.

Flauti.

Oboi.

Clarineti
in B \flat .

Fagotto I.

55. Goldmark, 'Country Wedding' symphony.

(By permission of Schott's Söhne, Mainz.)

Moderato. (ruhig und gebunden)

p sempre

Flauti.

Oboi.

Clarineti in B \flat .

Fagotti.

„etwas hervortretend“

p sempre

Viol. II.

56. R. Wagner, 'Lohengrin'.

Langsam.

Flauto I.

Oboi.

Corno inglese.

Clarineti in B \flat .

Fagotto I.

p

p

p

p

pp

57. R. Wagner, 'Lohengrin'. 3rd Scene.

By permission of Breitkopf & Härtel, Leipzig.

Flauti.

Oboi.

Corno inglese.

Clarineti in B \flat .

Elsa.

Fagotto I.

p

p

p

p

f

f

f

f

f

Ortrud.

Ortrud! bist du's, was machst du hier, unglücklich Weib? Unglück-lich Weib! wohl hast du Recht so mich zu nennen.

Streicher pizz.

32 58. Liszt. 'Faust' symphony. 2nd movement. (By permission of Schuberth & Co, Leipzig.)
Andante. (bald die letzten Takte des Satzes)

Flauti. *dolce amoroso* *poco più cresc.*

Oboi.

Clarti in A. *dolce amoroso* *poco più cresc.*

Fagotti. *dolce amoroso* *poco più cresc.*

59. R. Wagner. 'Tannhäuser'. (Score, p. 444.)

Moderato.

Flauto I & II. *pp*

Flauto III. *pp*

Oboi. *pp*

Clarineti in B \flat . *pp*

Fagotti. *pp*

Soprano I and II.

Chorus of young pilgrims. *Alto I and II.* Heil! Heil! der Gna - de Wun - der, Heil! Er - lösung ward der Welt zu Theil. Es

60. R. Wagner. 'Lohengrin'.

Mässig langsam.

Flauto I. *sehr zart* *p*

Flauto II & III. *p*

Oboi. *p* *mp*

Corno inglese. *p* *mp*

Clarineti in B \flat . *p* *mp*

Clarinetto basso in B \flat . *p*

3 Fagotti. *p*

Contrb.

The following exercise shows how chorales and pianoforte pieces may be arranged for from 3—15 wood-wind instruments in a great variety of ways. By means of such work the pupil will obtain facility in their use, combination and effect. Before each exercise the foregoing remarks as to compass etc. should be read and the whole of each chorale sketched out (mentally perhaps) for the various instruments; then it is sufficient to arrange one or two strophes only. In the same way in arranging pianoforte pieces, the entire piece should first be studied with the several instruments in view, and care must be taken that the key chosen is a good one. After this the doubling of parts and free added parts should be seen to before the actual work is begun. The first of the following exercises is an arrangement of a three-part chorale for more or less similar-sounding wood-wind, of which we have already spoken. It is well to arrange a chorale for three boys, or female voices and then to copy, as it were, the effect of these voices by means of a group of instruments, as below.

Exercise 1^a.

A three part movement for wood-wind (in close harmony).

1. „Vom Himmel hoch, da komm' ich her.“
Female voices.

Original.
Soprano.
Alto.

Flauto I II & III. 1^a

Oboi. 1^b

Corno inglese. 1^c

Clarinetti in B \flat . 1^c

Clarinetto basso in B \flat . 1^c

Flauto I II & III. 2^a

Oboi. 2^b

Corno inglese. 2^c

Clarinetti in B \flat . 2^c

Clarinetto basso in B \flat . 2^c

Fagotti. 3^a

Contrafagotto. 3^a

Clarinetto basso in B \flat . 3^b

Fagotti. 3^b

Corno bassetti. 3^c

Fagotti. 3^c

The above three-part chorale is here transcribed for various instruments and at various pitches to show the tone-colour of the instruments. In 1^a the 3 flutes sound clear, brilliant and joyful. In 1^b the oboes and English horn clear and peaceful. In 1^c the instruments are tender and pleasant; in 2^a gloomy, rather dull yet soft. In 2^b hard and sharp; in 2^c dark and veiled. In 3^a, b and c, the example is given in 2 different registers. No. 3^a (1) for 3 bassoons sounds hard and grim; (2) gloomy but full. No. 3^b (1) dark but full: (2) gentle and sorrowful. No. 3^c (1) mysterious and harsh: (2) mild yet full. This last would sound well if arranged for bass-clarinet or clarinet in A with 2 bassoons.

Exercise 1^b.

In four-parts.

Now take a four-part chorale for male voices: thus.

1. „Ein feste Burg ist unser Gott.“
Male Choir.

Tenori. Original.

Bassi.

Flauti. 1^a

Oboi. 1^b

Clarinetti in B \flat . 1^c

Clarinetti in A. 1^c

Fagotti. 1^c

Flauti. 1^b

Oboi. 1^b

Clarinetti in B \flat . 1^d

Clarinetti in A. 1^d

Fagotti. 1^d

The above chorale 'Ein feste Burg', and " the next are here transcribed for male chorus, which again is arranged for various groups of instruments. In 1^a the flutes and oboes, a thorough contrast in character, will sound clear and solemn; but a more profitable combination would be obtained by giving the second tenor part to the first oboe, and the 1st bass to the 2nd flute, since the voices would unite better thus. 1^b is gentle and pleasant; 1^c rather gloomy but not harsh; and 1^d slightly colourless

2. „Wer nur den lieben Gott lässt walten.“
Male Choir.

Tenori.
Original.
Bassi.



2^a is gloomy and dull; 2^b hard and sharp because of the deep register of the oboe: 2^c dark and rough; 2^d weak. The pupil should now work out several examples for himself in this manner, writing under each the anticipated effect.

Flauti. 2^a
Clarineti in A. 2^b
Oboi. 2^c
Fagotti. 2^d

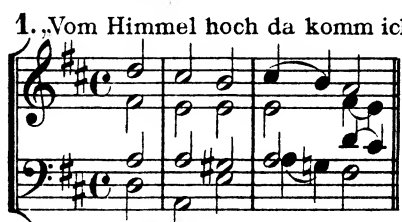
Exercise 1^c.

In 4 parts (extended harmony) for 4 instruments.

Extended harmony in four-parts does not invariably sound well when played upon four high or four low pitched instruments, as flutes, oboes and clarinets, or bass clarinet and bassoons: but we give one or two examples for study. When such instruments are judiciously mixed the effect is not bad.

1. „Vom Himmel hoch da komm ich her.“

Original.



No. 1^a is a combination not often used; it sounds clear *p* and sharp *f*, the effect being less happy because of the extended harmony and the contrast in tone. Since these defects are less marked in the 2nd and 3rd bars, their effect is better.

1^b Although here, too, are high pitched instruments playing in extended harmony, yet this passage sounds better because of the softer quality of tone; still extended harmony even here is not to be recommended. This example would sound *f* clear, and *p* mild. 1^c Here the combination of high and low pitched reed-instruments is good, though the tone of the oboe would penetrate, as it were, through the rather mild tone of the bassoon. 1^d is best of all, and sounds charming and cheerful. The chorale might have been better arranged in its original key *D* for these instruments than in *E♭* as 1^a, though two *A*-clarinets (instead of *B♭* clarinets) would be an improvement. A transcription in *G* for flutes and bassoons would be still more charming in effect.

Flauti. 1^a
Oboi. 1^b
Clarineti in B♭. 1^c
Fagotti. 1^d

2. „Sei Lob und Ehr dem höchsten Gut.“

Original.



2) This chorale is arranged for 3 or 4 different instruments of various characters. 2^a is a rather ineffective combination, for the deep, rich tone-colour of the clarinets does not unite well with the clear notes of the flute and the striking tone of the oboe. 2^b is rather better, but the two middle parts would be too powerful for the outer voices. 2^c is mild and rather dark in colour. 2^d would not sound well because of the harsh, even hard, tone of the oboe in the low register; it would be improved by giving the alto part to the flute, and the soprano to the oboe. 2^e is good in so far that the oboe part occurs in a less harsh register and the other instruments also are in effective positions.

Flauto I. 2^a
Oboe I. 2^b
Clarinetto I in B♭. 2^c
Fagotto I. 2^d
Flauto I. 2^e
Oboe I. 2^f
Clarinetto I in A. 2^g
Fagotto I. 2^h

Exercise 1^d.

The combination of more rarely used instruments in 4 parts (extended harmony).

Such combinations rarely occur, yet such an exercise has its object in familiarising the student with the instruments themselves. Let him arrange a few bars of a chorale like the following example, and add to each a description of the effect.

„Sei Lob und Ehr dem höchsten Gut.“

Original.

Corni inglesi.

Corni bassetti.

Corni inglesi.

Corni bassetti.

freudig, etwas hell.

finster, matt

mild, veiled

dunkel, rau

dark, mysterious,

Exercise 1a

Exercise 1e.

Free arrangements for 4 wood-wind instruments.

1. Mozart. Sonata in A. 1st movement.

THEMA.

Andante grazioso.

Andante grazioso.

Original.
Pianoforte.

Oboi.

Fagotti.

1 2 3 4 5 6 7 8

9 10 11 12 13,14 15 16 17 18

p *p* *mf* *fz* *fz* *fz* *p* *f* *p* *f* *p* *f* *p* *f* *p* *f*

No. 1. This andante, arranged for 2 oboes and 2 bassoons, is transposed from *A* to *G*, not to reduce the difficulty of key, but because of the stronger oboe tone against that of the bassoon — the tone of the latter

becoming thus more pungent. In the 1st bar an alto part has been added for 2nd oboe, which in the next bar plays, first, in unison with the 1st oboe and then becomes a free part again. In bars 3 and 4 a tenor part is added for 1 bassoon; 5 and 6 are like 1 and 2; in 7 and 8 the bassoon part reappears. In bars 7 (last quaver) and 8 the original alto part is given to the 1 bassoon (tenor) to obviate the distance between the bass and the upper parts. In bars 9–12 the 2 oboe plays an added part, which in 9–10 is in thirds with the 1 oboe, and subsequently becomes free. In 9–12 the original quaver figure is reproduced; but as the original accompaniment would not sound very effective, the 2nd bassoon sustains the bass while the 1st plays the quaver figure. In bars 13–14 a common form of abbreviation is used where bars are exactly repeated. In bars 16–18 are reproduced, with a slight addition, (2 oboe in 17, last quaver, and 18, 1 and 2 and 4–5 quavers). In the original key the piece would sound rather sharper.

The following pieces may be arranged thus:

Kuhlau, op. 88, No. 2, movement II.

„ op. 88, No. 3, movement II.

2. Kuhlau, Sonatina. op. 55. No. 4, 2nd movement.

Andante con espressione.

Kullak, op. 62, No. 1 and 3.

Bargiel, Suite op. 21, Sarabande.

Stephen Heller, op. 47, pt. I, No. 4.

J. Schmitt, op. 248, No. 2, movement II.

Original.
Pianoforte.

Clarineti
in B \flat .

Fagotti.

1 2 3 4 5 6 7 8 9

10 11 12 13 14 15 16

17 18 19 20 21 22 23 24 25 26 27

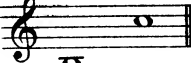
p sostenuto
legato cresc.
smorz.
p
dimin.
dimin.
p
pp
p
p
pp

No. 2. The original would be rather tiresome for bassoon because of the high part and in consequence

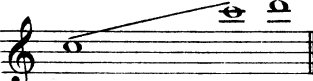
would sound badly; moreover the 1 clarinet would have to play certain passages which would be unnecessarily difficult and unsuitable — (cf. bars 22—23.) Therefore the piece is transposed to *F*. Bars 1—4 sound quite charming; 5—8 rather dark and rough because of the deep register. In part II occur several rearrangements of bars 9—16: the 2nd clarinet plays the quaver figure; the two bassoons sustain harmonious added notes, which are suggested in the original. These bars might be arranged in another manner for the same instruments. In bars 17—20 the theme is given out in a rather dark tone-colour, which becomes brighter in 21—22, only to return in 23—24 to the former. The concluding bars again are clearer. In bar 26 the tonic is omitted because there is no instrument to play it.

Remarks on the following exercises.

Of the strengthening of weak-sounding, or the softening of harsh-sounding registers by the aid of another wood-wind-instrument.

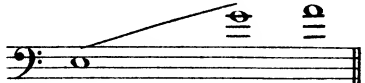
The deep, and a part of the middle register of the flute  can be doubled by the clarinet

in *A*, *B♭* or *C* in unison, the tone being mellow and full; the same doubled by the oboe would be thick, full and hard in effect. If the flute support the clarinet in this register in unison, the tone of the latter would be fuller but veiled and rather gloomy; but if the flute play in unison with the oboe in this register the harshness of

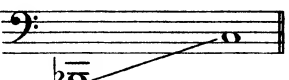
the oboe would be relieved by the flute tone. The notes from  on the clarinet and oboe would be rendered milder by a flute in unison; notes higher than *d* are rarely used for oboe or clarinet, as has been said. In the octave in alt the tone of the flute is clear and brilliant.

On the *A*, *B♭* or *C* clarinets the notes from  are rather dull yet full, which

quasi-defect is rectified by a bassoon playing in unison, and if a bass-clarinet also be added, the effect is a greater and fuller tone. The same register may be strengthened by the aid of the English-horn so far as its compass will allow, whereby the tone gains in strength as well as in richness.

This (tenor) register  is rather powerless and colourless towards the higher

notes, but this would be strengthened by the addition of a clarinet or English-horn. The combination (in this register) of bassoon and clarinet in unison would be less effective than that of bassoon and English-horn.

The deep register of the bassoon  which speaking generally is rough and harsh,

can be improved in effect by the combination of a bassoon and bass-clarinet, basset-horn (so far as its compass permits) or even double-bassoon.

One and all of these registers of the wood-wind can be strengthened and rendered of pleasanter tone-quality by the addition of a few strings: but of this more will be said later.

The wood-wind can be doubled or trebled to play the melody in unison or in the octave, or even in 3 octaves, as will be seen in the following exercises and in the score-examples.

Exercise IIa.

Chorale for 5 wood-wind instruments.

Original.

1. „Wie wohl ist mir, o Freund der Seelen.“

No. 1^a. Here the chorale is retained in its original key; the soprano is strengthened in the higher octave by the flute, which, however, emphasises the general mild tone of the other instruments and by no means makes it harsh or penetrating. In 1^b (transposed to *A*) the two soprano instruments stand forth very prominently. The tone of the soprano part would be rendered milder if the oboe played in unison with the flute. 1^c (transposed to *G*). Here the soprano (played by oboe and clarinet I in unison) of the oboe is rather veiled by the clarinet, but the tone is fuller. The tone of the oboe II stands out very prominently from the tenor and bass parts because of its deep register — which cannot be altered here. 1^d (transposed to *F*) sounds pleasanter than any of the preceding examples. In 1^e (in *A*) the bass is doubled in octaves, whereby the chorale gains in power and fullness. In 1^f (in *D*) the bass again is doubled in the octave, and the high pitch of the chorale and the combination of instruments renders the colour clearer than in 1^e. The union of the instruments in 1^f and their entry alone in sustained harmony is not to be thoroughly recommended; yet the combination is often unavoidable.

1^a Flauto I. Flauti. Clarinetto in B \flat . Clarinetti in C. Fagotti. Fagotto I.

1^b Flauto I. Oboe I. Clarinetto in A. Fagotti. Fagotto I.

1^c Oboi. Clarinetto in B \flat . Fagotti. Fagotto I.

1^d Sopr. Alt. Ten. Bass.

1^e Sopr. Alt. Ten. Bass.

1^f Sopr. Alt. Ten. Bass.

Chorale for 5 instruments and an added part.

Original.

2. „Werde munter, mein Gemüthe.“

No. 2. It should be noted that an added part must be given to a very soft-sounding instrument. In this chorale such an added part occurs divided between the tenor and bass. 2^a is transposed to *B \flat* , the I bassoon playing the added part, the general tone being mild and soft. If the chorale were arranged in the original key for these instruments (*F*) a somewhat dark tone-colour would be obtained by the deep register of the flute and clarinets. In 2^b the chorale is a note higher, the tone thereby gaining in brilliancy and life. The added part is given to the II clarinet. Ex. 2^c (in *D*) sounds clear but not powerful in the higher positions: the II oboe plays the tenor and I clarinet the alto throughout; by the alto (clarinet) part playing between the 2 oboes a better union of these instruments is obtained. The character of 2^d is full and powerful, the soprano standing out prominently because of the quality of tone of the oboe. 2^e sounds soft and mild because all the parts are, as it were, in a 'mellow' register.

2^a Flauto I. Clarinetto in B \flat . Fagotti. Fagotto I.

2^b Flauto I. Oboe I. Clarinetto in C. Fagotti. Fagotto I.

2^c Oboi. Clarinetto in B \flat . Fagotti. Fagotto I.

2^d Sopr. Alt. Ten. Bass.

2^e Sopr. Alt. Ten. Bass.

*) The free part must always be given to a soft-toned instrument.

Exercise II^b.

39

Free arrangement for 5 wood-wind-instruments.

1. Mendelssohn, Childrens' pieces, op. 72, No. 1.
Allegro non troppo.

Original.
Pianoforte.

Oboe I.

Clarineti
in A.

Fagotti.

mf sf sf sf sf p

3 4

mf sf sf sf sf p

7 8

p p p p p p

cresc. cresc.

15

sf sf sf sf sf sf

dimin. p p p p p p

29

p p p p p p

30 31 32 33

sf *p* *cresc.* *f*

40 No. 1. Is arranged for oboe, 2 clarinets and 2 bassoons in the original key. In bars 3–4, and 7–8 the tone of the oboe will not be very prominent because of the *sfz.* as well as of its low register compared with the other instruments. In bar 15 the oboe takes up the melody: in 29–32 an added part occurs played by I clarinet. In the last 4 bars the passage of thirds is slightly altered (see small notes) because the original is difficult for the clarinets owing to the high register, and the effect is not very good. Were the arrangement for 6 or 7 instruments (one or two flutes additional) the last bars, and indeed, the entire piece, could be very effectively reproduced.

2. Kuhlau, Sonatina, op. 88. No. 2, 2nd movement.

Andante cantabile.

Original. Pianoforte.

p sostenuto

Oboe I.

p sostenuto

Clarinetti in A.

sempre legato

Fagotti.

p

1 2 3 4 5 6 7 8

No. 2. Is transposed to *D* for the sake of the higher register of the oboe, and that the bassoon part be not too low for a good effect. Nevertheless the piece might have been arranged as in the original, with clarinets in *B*₂. In our arrangement the piece sounds peaceful and gentle. The oboe plays the melody throughout; I clarinet plays at first the quaver figure, and II clarinet an added part, to make, with the bassoons, the harmony as complete as possible. The bassoons play as in the original. Part 2, bars 9–16, the clarinets take the sustained added parts, whilst the 1st bassoon plays the quaver figure, and the 2nd bassoon and added bass. Bars 17–32 are as 1–8. In writing a *legato* passage for wind, the words *sempre legato* are more rarely used than the slur — though in this example this has *not* been done. Other pieces may be arranged thus:

1) 1 Flute.	2) 2 Oboes.	3) 2 Flutes.
2 Clarinets.	2 Clarinets.	2 Clarinets.
2 Bassoons.	1 Bassoon.	1 Bassoon.

The following pieces are good to arrange thus:

Stephen Heller, op. 46, pt. II, 17; op. 17, pt. 1 and 10.

Robert Schumann, op. 68, No. 34 and 36.

Th. Kullak, op. 61, No. 9 and 12.

Mendelssohn, 'Song without words'. No. 35.

H. Stiehl, op. 54, No. 4, 15 etc.

Exercise III^a.

Chorale for 6 wind-wood-instruments with and without an added part.

1. „Warum sollt' ich mich denn grämen.“

Original.

1^a Sopr. Flauti.

Alt. Clarinetti in B \flat .

Ten. Fagotti.

Bass. 1^b Sopr. Oboi.

Alt. Clarinetti in B \flat .

Ten. Fagotti.

Bass. 1^c Sopr. Flauto I.

Alt. Oboe I.

Ten. Clarinetti in A.

Bass. Fagotti.

The chorale is arranged in 3 different ways. 1^a shows it in the original key. The treble is strengthened by the mellow flute in the higher octave, and the bass by the bassoon, occasionally in the lower octave. In bars 2 and 3 the bassoons play in unison, the tone here being mild yet full. In 1^b, in *F*, the treble (oboe I and clarinet I) is in unison, but gains in power by means of the clarinet. The alto (oboe II) is somewhat prominent. The bass is somewhat similar to 1^a (bassoons in 8^{ves}); but the example is not so good as 1^a; — 1^c (in *D*) again, with the doubled outer parts, in 8^{ves}, is better than 1^b; the tone of the oboe is somewhat softened by the flute playing the higher 8^{ve}, nevertheless the effect is brilliant. The other instruments accomodate themselves, (though in a rather gloomy tone-colour) to the soprano. This example is, as it were, darker in colour than either of its predecessors, yet would be even darker were the flute to play in unison with the oboe.

The following combinations may also be studied:

- 1) 2 flutes, 2 oboes, 2 clarinets, 1 bassoon; or 2) 1 flute, 2 oboes, 2 clarinets, 1 bassoon.

2. „Dir, dir, Jehova, will ich singen.“

Original.

2^a Sopr. Flauti.

Alt. Clarinetti in B \flat .

Füllst. Ten. Fagotti.

Bass. 2^b Sopr. Flauto I.

Alt. Oboe I.

Füllst. Clarinetti in C.

Ten. Fagotti.

Bass. 2^c Sopr. Oboi.

Alt. Clarinetti in A.

Füllst. Ten. Fagotti.

Bass.

No. 2. In this chorale an added part occurs between the alto and tenor, and tenor and bass. When there are 6 wood-wind instruments and an added part it is good only to strengthen one of the outer parts in unison, or the treble in the higher 8^{ve}, or the bass in unison or the lower 8^{ve}. In 2^a the treble is played by 2 flutes in 8^{ves}, the other parts in simple harmony, the tone-colour being clear and joyful. 2 is somewhat similar but in a higher register, which produces a rather sharp effect in the treble while the lower voices sound mild and veiled. It were better to add a second oboe instead of the flute, to take the alto part, while the clarinets give the added and tenor parts, and the bassoons play the bass in 8^{ves}, the tone becoming thus more powerful and ful. 2^c it rather hard because of the oboes, though oboe I is softened by the 1st clarinet; the 2 oboe here in the low register is rather too penetrating in proportion to the other instruments. The example is not altogether to be recommended, though if strings or brass were added, it would be sufficiently good.

44 The following pieces are recommended for arrangement.

Frz. Schubert, op. 33.

Mendelssohn, 'Songs without words', No. 44 and 48.

J. Schmitt, op. 248, No. 2, 2nd movement.

2. Frz. Schubert, 'Deutsche Tänze', op. 33, No. 7.

Stephen Heller, op. 47, pt. 1, No. 3.

Jean Vogt, op. 70, No. 2.

Original
B dur.
Pianoforte.

Flauti.
Clarineti
in A.
Fagotti.

No. 3. Such a dance, wherein the orthodox style of waltz-accompaniments is given to the wood-wind (2 clarinets and two bassoons) is rarely found. Bassoon II plays two parts — the bass and the accompaniment; the I bassoon can also play the bass in unison with bassoon II and so emphasize the note. The possibility only — not the probability — is shown here; the effect of the parts sounding on the 2nd and 3rd beats is at best comic. Speaking generally the tone is pleasant and mild; further analysis seems unnecessary.

Similar exercises may be arranged for

- 1) 1 flute, 1 oboe, 2 clarinets, 2 bassoons; 2) 1 flute, 2 oboes, 2 clarinets, 1 bassoon; 3) 2 flutes, 1 oboe, 1 clarinet, 2 bassoons, this last is not to be strongly recommended.

3. Beethoven, Sonata op. 26, 1st movement.

Original.
Pianoforte.

Flauto I.
Oboe I.
Clarineti
in B \flat .
Fagotti.

Andante.

D. s. F. 2 sf

The musical score is divided into three systems, each containing multiple staves. The notation includes various musical symbols such as notes, rests, and dynamic markings. The first system (measures 8-15) features a piano (*p*) dynamic and a crescendo (*cresc.*). The second system (measures 16-23) includes a forte (*f*) dynamic and a crescendo (*cresc.*). The third system (measures 24-30) also includes a forte (*f*) dynamic and a crescendo (*cresc.*). The score is written in a key signature of two flats (B♭) and a common time signature (C).

No. 4. The theme of Beethoven's sonata is transposed for these instruments to B♭, not because of its difficulty, but of the better effects, and to obtain the deeper notes of the bassoon. The first 8 bars are true to

the original; though in bar 2 a note (*e*♭ in original) is omitted, because it is not playable by the proper instruments. Were this note absolutely indispensable, the flute must take the upper voice and the 2 clarinets the added notes; but this would produce an inferior effect. Bars 5—8 could be played with good effect by flute, clarinets and I bassoon. But to avoid dividing the 8-bar phrase into 4+4 bars for two sets of instruments, the above arrangement is adopted, the flute taking a middle part. In bars 9—16 the outer and middle parts are strengthened; thus, *e. g.* the flute plays the melody throughout in the higher 8^{ve}. In 13—14 and 15—16 an added part is given to clarinet II, and the bass is doubled in the lower 8^{ve} by bassoon II. Bars 17—26 are like the original. Bar 26 the oboe reappears; bars 9—12 are repeated; 27—30 are like the original except that in 29 the I bassoon has an added part, and in 30 the bars is in 8^{ves}.

A better combination for this piece would be 2 flutes, 1—2 oboes, 2 clarinets, 2 bassoons and 1 double-bassoon.

Exercise IV^a.

Chorale for 7 instruments with and without an added part.

1. „Ach bleib mit deiner Gnade.“

Original.

The image displays three musical staves for a chorale. The first staff, labeled 'Original.', shows a two-part setting in G major (one sharp) with a common time signature. The second staff, labeled '1a', shows an arrangement for five instruments: Flauti (Flute), Oboe, Clarinet in A, and Fagotti (Bassoon). The third staff, labeled '1b', shows an arrangement for five instruments: Flauto I. (Flute I), Oboi. (Oboe), Clarinet in B♭, and Fagotti (Bassoon). Both arrangements (1a and 1b) show the same five instruments playing the same melody, but with different voicings and instrument combinations. The notation includes various musical symbols such as clefs, key signatures, time signatures, and note values.

1^a

Flauti.

Oboe.

Clarinet in A.

Fagotti.

1^b

Flauto I.

Oboi.

Clarinet in B♭.

Fagotti.

No. 1. Example 1^a is without an added part and is transposed to *A* to give greater effect to the treble and to allow the bassoons to play the bars in 8^{ves}. The treble appears in 3 parts, in unison between II flute and I clarinet, and in the higher 8^{ve} (I flute). The oboe and II clarinets take the alto and tenor, though a better effect would be obtained by giving the alto to clarinet I, and the treble to oboe I. The tone-colour would thus become more even, and the actual tone of the oboe would be softened by flute II in unison. In 1^b the parts are similarly divided but the instruments are different, and the strophe, transposed to *B*♭, would sound clearer than 1^a. In the original key (*D*) the doubled bass in 8^{ves} would be impossible, though it could be given by 2 bassoons in unison. The tone of 1^b would be both milder and gentler if the flute and oboe I played in unison.

2. „Ach, bleib' mit deiner Gnade.“

Original.

No. 2. Example 2^a shows the same choral in another key, with an added part, which in the first three bars is divided between the tenor and bass parts and is played by clarinet II. The treble and bass parts are strengthened by means of the 8^{ves}, but the other parts are simply reproduced, and the general effect is full and powerful. 2^b sounds clear but hard because of the tone of the oboe and the deep register of the bassoon; the 2 flutes play the treble in 8^{ves}, and the bass is given to clarinet II and bassoon in 8^{ves} — an effect which cannot be recommended. It were better to let these instruments play in unison, (bassoon an 8^{ve} higher than in the example), which, again, with such a division of the parts, is not good since the high pitch of the bass would lend it the character of a tenor part. The alto, tenor and added voices are played by 2 oboes and clarinet I. 2^c is similar to 2^a and its tone is gentle and clear; the alto (oboe) is covered rather by the outer voices. 2^d is brightest of all because of the key.

2^a

Flauto I.

Oboi.

Clarineti in A.

Fagotti.

Bass.

2^b

Flauti.

Oboi.

Clarineti in B \flat .

Fagotto I.

2^c

Flauti.

Oboe I.

Clarineti in B \flat .

Fagotti.

2^d

Flauti.

Oboi.

Clarinetto I in A.

Fagotti.

3. „Sei Lob und Ehr' dem höchsten Gut.“

Original.

No. 3. The strengthening or doubling of parts here is as before, and is accomplished by using a bassethorn and bass-clarinet, instruments which do not always occur in an orchestra. In 3^a the English-horn takes the added part in a tolerably powerful register, but if this instrument is not to hand, the part can be given to some mild-toned instrument. As a fact the English-horn here is rather hidden by the tone of the other instruments. The bass-clarinet plays the tenor and the bassoon and double-bassoon take the bass in 8^{ves}. This could also be effected by the bass-clarinet and double-bassoon in 8^{ves}, the bassoon taking the tenor, though the union of tone would certainly not be improved thereby, as the bass-clarinet and double-bassoon do not combine in 8^{ves} so well as 2 bassoons. The example sounds full, yet sharp and hard. 3 shows what we have described as not good — the combination of bass-clarinet and double-bassoon in 8^{ves}. Since here reed instruments are used chiefly, the double-bassoon combines better with the other instruments than when (as before) 2 oboes, English-horn and bassoon take part. In order to obtain a better progression of the parts, the added part alternates between the alto and tenor, clarinet II plays an added part until the pause. The effect of 3^b is much softer than that of 3^a.

Other combinations are

1 oboe, 1 clarinet, 2 basset-horns, 1 bass-clarinet, 2 bassoons } or 1 bassoon and 1 double-bassoon.
 1 flute, 2 clarinets, 1 basset-horn, 1 bass-clarinet, 2 bassoons }

2. Mendelssohn, 'Song without words', No. 4.

Moderato.

Original.
Pianoforte.

Flauto I.

Oboi.

Clarinetti in A.

Fagotti.

4 5 6 7 8 9

10 11 12 13 14 15

No. 2. In the introduction to this piece some slight alteration is necessary for the chosen wood-wind. In the pianoforte part (opening bars) the melody and accompaniment are given to the right hand; in order to reproduce this by the wood-wind the oboes and flute take the melody while clarinet I takes the figure of accompaniment, clarinet II and added part. The oboe renders these bars rather hard and penetrating, an effect that could be improved by omitting oboe II, giving the oboe I part to the flute, and oboe II part to oboe I. A still milder and softer effect would be obtained by omitting both oboes, and giving the passage to flutes, clarinets and a bassoon. The bass part cannot be exactly reproduced as the compass of the bassoon is insufficient. In bars 5, 6, 7 the upper part is doubled by oboe I: 6—7 oboe II and clarinet II play added parts. From bars 19—24 the upper voice is doubled in the higher 8^{ve} by the flute to give a brighter effect; and further additions occur in 13—16 (clarinet I and II); bar 15 clarinet II and bassoon: 16, 2 clarinets; 17 ditto; 18, clarinet I; 19, clarinet II; 20, bassoon I. In 23—24 the oboe I might play in 8^{ves} with the flute, yet the colour is pleasanter and milder when clarinet I plays.

These pieces may be arranged thus:

Mendelssohn, 'Song without words', No. 41.

J. Vogt, op. 10, No. 2.

Beethoven, op. 10, No. 2, 2nd movement.

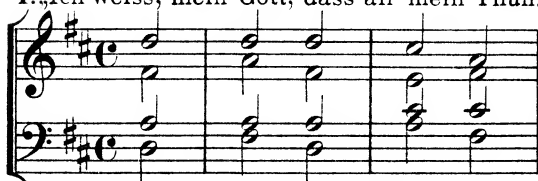
J. Schmitt, op. 249, No. 7 (solo).

Exercise V^a.

Chorale for 9 instruments etc.

1. „Ich weiss, mein Gott, dass all' mein Thun.“

Original.



1^a

Flauti. Sopr. Alt.

Oboi.

Clarinetti in B \flat .

Ten. Bass.

Fagotti.

1^b

Flauti. Sopr. Alt.

Oboi.

Clarinetti in A.

Ten. Bass.

Fagotti.

1^c Sopr.

Flauti.

Oboi.

Clarinetti in A.

Fagotti.

1^d

Flauti. Sopr. Alt.

Oboi.

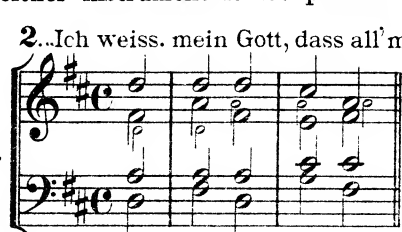
Clarinetti in B \flat .

Fagotti.

1. Although in 1^a the chorale is transposed to *F*, it might have been arranged for the same instruments in the original key, though not if the clarinet II were used as a bass instrument. With the exception of the soprano the other parts are doubled in unison, the tone-colour of the instruments making an effective combination. But as at present arranged the chorale would sound thin and mild since the bass (in the high register of bassoon II) would have much of the character of a tenor part. In 1^b the outer parts are doubled in the 8^{ve}. Flute II and oboe II play the alto, and the clarinet the tenor. The tenor part (here for clarinet in unison) is not good, yet the general effect here would be better than in 1^a. In 1^c the parts are again doubled as before, but the instruments divide the parts with better effect. In these three examples flute I might play an 8^{ve} lower, where by the effect would be less brilliant. 1^d differs from the preceding examples in so far that all the voices are doubled in the 8^{ve}, an effect we have already noticed in connexion with the strings. When there are but in the higher 8^{ve}. Here the alto and tenor are so doubled by flute II and clarinet I, the effect being good because neither instrument is too prominent in this register.

2. „Ich weiss, mein Gott, dass all' mein Thun.“

Original.



2^a

Flauti. Sopr. Alt.

Oboi.

Clarinetti in A.

Fagotti.

Bass.

2^b

Flauti. Sopr. Alt.

Oboi.

Clarinetti in A.

Fagotti.

Bass.

2. Here an added part occurs at first between alto and tenor, and subsequently between treble and alto, and in 2^a is given to clarinet I. The treble appears in three parts, two in unison and one in the higher 8^{ve}; the bass is in 8^{ves} but the middle voices are single. The effect is clear, strong and full. In 2^b (*D*) the outer voices are doubled in the 8^{ve}, the alto in unison (flute II and oboe II); the added and other parts are single. This doubling of the alto is good since the flute rectifies the harshness of oboe II, and, on the other hand, the oboe II strengthens the rather dull tone of flute II. A good effect is this arrangement.

3. Sollt' ich meinem Gott nicht singen.

Original.

3^a Without free part.

Flauti.

Oboi.

Clarinetti in B \flat .

Fagotti.

3^b

Flauti.

Oboi.

Corno inglese.

Corno bassetto.

Clarinetto basso in B \flat .

Contrafagotto.

3^c With free part.

Oboe I.

Clarinetti in B \flat .

Corno inglese.

Corno bassetti.

Clarinetto basso in C.

Contrafagotto.

In No. 3 occurs an added part. In 3^a the original key is preserved, the treble is doubled in 8^{va}, alto and tenor in unison while the remaining parts are single. In bar 3 two instruments exchange parts: oboe II taking the tenor and clarinet I the alto, while bassoon I plays the added part, and the general effect is better than in the first two bars. In 3 transposed to *G*-minor. are used some instruments of an uncommon character in the orchestra. The treble occurs in 3 parts, the bass in 8^{va}, the remaining parts singly. Here again the parts are changed from one to another instrument, the change being rendered advisable (as before) by the desire to obtain a more mellow effect. In 3^c (*A*-minor) the chorale is arranged for 8 instruments without an added part, all the voices except the bass playing in unison. The effect is bright, full, and powerful. The combination of the bass in 8^{va}, is restrained from undue prominence by the five reed instruments.

Other groups of instruments are:

- 1) 2 oboes, 2 clarinets, 1 English-horn, 2 bass-clarinets, 1 bassoon.
- 2) (each) flute, oboe, clarinet, English-horn, basset-horn, bass-clarinet, bassoon, double-bassoon.

Exercise V^b.

Free arrangement for 8 wood-wind-instruments.

1. Rob. Schumann, Op. 68. 'Jugend-Album' No. 34.

Sehr langsam.

Original.
Pianoforte.

Flauti.

Oboi.

Clarinetti
in B \flat .

Fagotti.

Measures 1-8. Dynamics: *p*. Rehearsal mark 1.

Measures 9-15. Dynamics: *p*, *sf*, *fp*. Rehearsal mark 2.

Measures 16-21. Dynamics: *pp*. Rehearsal marks 1, 2, 3. Tempo changes: 'Rather slower.', 'Tempo I.'

10 11 12 13 14 15 16 17 1 2 3 18 19 20 21

22

22

10 11 12 13 14 15 16 17 1 2 3 18 19 20 21

p

p

p

p

No. 1. In this piece which is well adapted for arrangement to the above instruments, doubling of parts occurs chiefly in the upper voices; the following show where these and other means of strengthening the instrumentation occur: bars 4—9, 2 flutes, oboe I; bar 7 clarinet II; bars 10—13 flute I and II; bars 10—13 clarinet II and bassoon I; bars 14—17 flute I; bars 15—17 clarinet II and I; bars 20 bassoon I; bar 21—22 flute I and II. The bars marked with figures are repetitions of these so numbered earlier in the piece. The doubling and strengthening of parts is for the purpose of heightening the general effect.

The following pieces may be so arranged:

Mendelssohn, 'Songs without words', No. 48, and 4.

Frz. Schubert, op. 94, No. I.

Rob. Volkmann, op. 24, pts. I, No. 3; II, No. 5.

Stephan Heller, op. 82, No. 7.

Liszt, 'Consolations', No. 1.

Frz. Schubert, op. 33, No. 1 and 2.

Rob. Schumann, op. 68, No. 34.

2. Beethoven, Sonata, op. 31, No. 3, 2nd movement.

MENUETTO.
Moderato e grazioso.

Original.
Pianoforte.

p

cresc.

p

1 2 3 4 5 6 7 8 9

1.

Flauto I.

Oboi.

Clarinetti
in B \flat .

Clarinetto
basso in B \flat .

Fagotti.

cresc.

cresc.

cresc.

p

p

p

[illegible]

CODA.

No. 2. is arranged for the 8 instruments in the original key. In bars 1 and 2 clarinet II plays a free part added to fill up the somewhat empty harmony. In bars 4–10 the bass-clarinet plays an added part, which in this register sounds mellow. Bars 11–19 had to be rearranged since the original is not well adapted for orchestration; therefore added parts occur which lend a full and generally good effect in conjunction with the original quaver-figure. In bars 14–19 the flute strengthens the melody in the higher 8^{ve}. Bars 20–23 are true to the original. Bar 24 a note is added for clarinet II; bars 24–25 bassoon II takes the lower bass 8^{ve}. Bars 20–24 are a repetition, but in 25–27 are a few additions. The numbered bars signify repetitions of previous bars, though here the melody (bars 1–10) is played in the upper 8^{ve} by the flute. In bars 38–46 doubled notes occur in the flute-part (an 8^{ve} higher than the bass-clarinet), 2 oboes (8^{ve} higher than the clarinets) playing after the melody and bassoon I in the higher 8^{ve}. The flute and oboes might be omitted from bars 38–46.

*) Here the flute plays the melody an 8^{ve} higher, with clarinet.

3. Mendelssohn, 'Song without words', No. 16.

Andante.

Original.
Pianoforte.

Oboi.

Clarinetti

Corno
bassetto.

Fagotti.

Contrafagotto.

3. Mendelssohn, "Song without words", No. 16.

Andante.

Original.
Pianoforte.

Oboi.

Clarinetti
in A.

Corno
bassetto.

Fagotti.

Contrafagotto.

pp, *cresc.*, *f*, *dim.*, *p*, *sforz.*

Red., * Red., *

1, 2

3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15

16 17 18 19 20 21 22

23 24 Red. 25 * dim. Red. 26 *

dim. p Red. 27 Red. * Red. 28 * Red. 29 * 30

dim. p dim. p dim. p dim. p

No. 3. Since the introductory bars here would have no effect if played by two instruments, it is allowable

to sustain the harmony by the aid of some soft sounding instruments as we have done, and to give the broken chords to some instrument of sufficient compass, which here is either clarinet or basset-horn. The double-bassoon plays generally *f* and strengthens the bass in the lower 8^{ve}. In bars 4, 6, 9 the basset-horn and 10 the bassoon take an added part; bar 12 clarinet II; bars 12—13 basset-horn; bar 15 bassoon II; bar 16 clarinet II and bassoon I; bars 17—18 clarinet II; bars 18—20 clarinet II and basset-horn, bassoon II and double-bassoon; bar 23 clarinet II; bar 24 basset-horn; bar 25 bassoons. The bars 25—30 are arranged in a similar manner to the introduction, but the basset-horn-part might be arranged here for a 3rd clarinet.

4. Mendelssohn. 'Song without words', No. 35.

Moderato.

Original. Pianoforte.

p

1 2 3 4 5

Oboi.

Corno inglese.

Clarineti in A.

Clarinetto basso in B \flat .

Fagotti.

p

The musical score is arranged in four systems, each containing a piano (p) and organ (o) part. The key signature is D major (two sharps). The score includes various dynamics such as *cresc.*, *sf*, *dim.*, *p*, *f*, *pp*, *mf*, and *ritard.*. Tempo markings include *a tempo*. The score is numbered 13 through 32, with measures 20-27 and 28-32 repeated. The organ part features complex chordal textures and melodic lines, while the piano part provides harmonic support with chords and moving lines. The score concludes with a *Red.* (Reduction) marking and a final measure.

No. 4. The original key is again retained, and the piece offers fewer difficulties to the arranger than the
D. & F. 2

other since it is more practicable for the several instruments. In the following parts are certain additions and doubled notes. Bars 1—5 bass-clarinet and English-horn; bars 6—9 clarinet II, bars 9—13 and 14—17 bass-clarinet. In bars 18—22 the three upper voices are doubled an 8^{ve} lower by the clarinets. Since here the single (clarinets) and double (oboes) reed instruments each form a separate group, it would be better to mix them so that the 1st clarinet stands between the oboes, and clarinet II, between oboe II and English-horn.

Bar 18
c. g.

Oboe I.
Clarinet I.
Oboe II.
Clarinet II.
English-Horn.
Bass-Clarinet.

The last three quavers of bar 21 must be taken by the instruments as already arranged. In bars 23—27 the bass-clarinet has an added part; bar 26 oboe II; bars 28—33 bassoon II doubled in the 8^{ve}; bar 29 clarinet II; bar 30 bass-clarinet, 31 English-horn and bass-clarinet. Here the bars 2, 3 and 4 recur. The piece will be pastoral in character when orchestrated thus.

Exercise VI^a.

Chorale for 9 wood-wind-instruments with and without an added part.

„Eins ist Noth! ach Herr dies Eine.“

Original.

With Free part.

a)

Flauti.
Oboi.
Clarineti in B \flat .
Fagotti.
Contrafagotti.

b)

Flauto I.
Oboi.
Corno inglese.
Clarineti in B \flat .
Clarinetto basso in B \flat .
Fagotti.

c)

Flauti.
Oboi.
Clarineti in A.
Clarinetto basso in B \flat .
Fagotto I.
Contrafag.

The first example a) is transposed to *F* and arranged for 9 instruments. The doubling of parts is effected as before, and may be easily noticed by means of the brackets. As the oboe II is not sufficiently extended in compass to play the alto the chorale is transposed a tone higher. In this arrangement the treble is very brilliant; the alto (oboe II and clarinet I in unison) sounds full; as does the tenor (clarinet II and bassoon I in unison.) By combining the two bassoons the tone gains in fullness and power. In Ex. b) an added part occurs, and here again all the voices except that added are doubled. c) transposed to *G* differs from the others as the middle voices are doubled in the higher 8^{ve}, whereby a fuller and richer effect is obtained. As already explained, the doubling of a middle part in the higher 8^{ve} should be effected by means of soft sounding instruments, as here (flute II and clarinet I). If the chorale is to be arranged thus without the added part, the bass-clarinet or clarinet II should play in unison with bassoon I. All these Exs. sound well.

* The Free part may take *g'* on the 1st and 2nd crotchet, or *g* on the 3rd and 4th.

Exercise VI^b.

Free arrangement for 9 instruments.

1. Frz. Schubert, 'German Dances', op. 33, No. 2.

The musical score is arranged for 9 instruments. The first system (bars 1-8) shows the original piano arrangement and the woodwind parts. The second system (bars 9-18) shows the piano part with a first and second ending, and the woodwind parts. Dynamics include *pp*, *p*, *mf*, and *p*.

No. 1 Is arranged for the 9 instruments in the original key; and doubled parts etc. occur in the following: bars 1—5 flute I, melody an 8^{ve} higher and again in bars 5—9, in which also the doubling of the bass and addition of a free part occur. In part II the strengthening occurs as in the last half of part I. The 1st flute might have been omitted in the first 4 bars.

The following pieces may be arranged.

Rob. Schumann, op. 15.

Mendelssohn, 'Songs without words', No. 9 and 35.

Frz. Schubert, op. 33.

The bass-clarinet and double-bassoon could be added with good effect here.

2. Rob. Schumann, 'Kinderszenen', op. 15, No. 2.

M. M. ♩ = 112.

Original.
Pianoforte.

Flauto I.

Oboi.

Corno inglese.

Clarineti
in A.Clarinetto
basso in B \flat .
(*)

Fagotti.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

*) Better to use bass-clar. in A

The musical score is divided into two systems. The first system contains measures 22 through 28, and the second system contains measures 29 through 36. The score is written for multiple instruments, with parts for bass, oboe, English-horn, and bassoon. Key markings include *ritard.* (ritardando) and *a tempo*. Dynamic markings such as *p* (piano) and *mf* (mezzo-forte) are used throughout. The notation includes various note values, rests, and articulation marks.

No. 2. This piece, like the preceding dance, has doubled and added parts, which are notified as follows. Bars 1—6 bass-clarinete, added part; oboe in bars 3 and 4 added part and a strengthening part; bars 7—16 doubling of the upper part at first in unison then in the higher 8^{ve}, and the bass doubled in the lower 8^{ve}; bars 7—8 clarinet II and oboe II have added parts, bassoon II sustains the *e* while bassoon I and II both have an added part; bars 9—16 English-horn and bass-clarinete have a part to fill up the harmony as also has clarinet I in bars 13—15; 15—17 the bassoons sustain and double the bass, bassoon I playing an added part; bars 18—19 bassoon I has an added part; bars 22—36 the bass is doubled in the 8^{ve}; in bars 22—24 are two added parts for oboe II and English-horn; bar 29 oboe I has an added part while flute and oboe II have doubled parts in the higher 8^{ve}, and so on to the end.

Exercise VII^a.

Chorale for 10 instruments etc.

„Wie schön leuchtet der Morgenstern.“

Original.



Three arrangements of the chorale for 10 instruments are shown, labeled a), b), and c).

a) Flauti. (Soprano and Alto), Oboi., Clarinetto in B \flat , Clarinetto basso in B., Fagotti., Contrafagotto. The instruments are arranged in two groups of five, each playing the original melody in unison and octave.

b) Flauti. (Soprano and Alto), Oboi., Clarinetto in A., Clarinetto basso in C., Fagotti., Contrafag. The instruments are arranged in two groups of five, each playing the original melody in unison and octave. A 'Free part.' is indicated for the Clarinetto in A.

c) Flauti. (Soprano and Alto), Oboi., Clarinetto in B \flat , Clarinetto basso in B \flat , Fagotti., Contrafag. The instruments are arranged in two groups of five, each playing the original melody in unison and octave. A 'Free part.' is indicated for the Clarinetto in B \flat .

In a) the chorale is arranged for ten instruments without added parts; the brackets show the four parts and the combination of the instruments in unison and the octave. The effect is full and mellow. Ex. b), transposed to G, has an added part given to clarinet I. To obtain a clearer and stronger effect of the treble the two flutes play in unison. Ex. c), in B \flat , differs from the others in the doubling of the middle parts in the higher 8^{ve}; the treble is doubled, and the bass tripled. The effect is very brilliant and sharp, not only through the high pitch but also because of the doubled middle parts. In G, F or E \flat the effect would be still better.

Similar arrangements may be made for:

- 1) 1 flute, 2 oboes, 1 English-horn, 2 clarinets, 1 basset-horn, 1 bass-clarinet, 1 bassoon, 1 double-bassoon.
- 2) 1 piccolo, 1 flute, 2 oboes, 1 English-horn, 2 clarinets, 1 bass-clarinet, 2 bassoons.
- 3) 1 flute, 1 oboe, 1 English-horn, 2 clarinets, 1 basset-horn, 1 bass-clarinet, 2 bassoons, 1 double-bassoon.

Exercise VII^b.

Free arrangement for 10 instruments.

1. Rob. Schumann. 'Kleine Romanze', op. 68, No. 20.

Original. Pianoforte. Nicht schnell. *fp* *p* *espress.*

Flauti. *pespr.* *fp* *p* *sf*

Oboi. *fp* *p* *sf*

Corno inglese. *p* *sf*

Clarinetto in B \flat . *p* *sf*

Clarinetto basso in B \flat . *p* *sf*

Fagotti. *pespr.* *fp* *p* *sf*

1 2 3 4 5 6

D. & F. 2

67

No. 1. In the first four bars (melody doubled as in original) only mellow toned instruments are used with the exception of the oboe. This latter part is so distinctly noticeable that it might be better to give it to the English-horn or clarinet I since thus a softer, more tender effect would be created, and either combines better with the bassoon I. In bars 5—8 the melody is found in 3 octaves, the flutes playing the accompanying figure doubled in the upper 8^{ve}. From 8—11 the outer voices are strengthened in both upper and lower 8^{ves}, while (bars 9—10) flute II and bar 10 clarinet play an added part. Bars 12—14 are similar to 5, 6, 7; bars 15—16 the bass is doubled in the lower 8^{ve} and clarinet II has an added part; bars 17—20 are as in the original. Bars 18—20 sound dull and gloomy.

These pieces may also be thus arranged:

Mendelssohn, 'Songs without words', No. 3 and 9.

Frz. Schubert, op. 94, No. 1.

Rob. Schumann, op. 85, No. 1 etc.

But with the larger number of instruments it is not difficult to find pieces suitable for these arrangements.

2. Kullak. Kinderleben. (In Childhood.) Op. 62, No. 7.*)

Original.
Pianoforte.

p dolce

1 2 3 4 5 6 7 8

Flauto I.

Oboi.

Corno inglese.

p dolce e espress.

Clarineti
in A.

Clarinetto
basso in B \flat .
(*)

Fagotti.

Contrafagotto.

This musical score is for the song "The Rose Tree" from the opera "The Mikado". It is a vocal score for a soprano and a piano accompaniment. The score is written in 3/4 time and features a key signature of one sharp (F#). The tempo is marked "Allegretto". The score is divided into two systems, each containing five staves. The first system includes a vocal line and four piano accompaniment staves. The second system includes a vocal line and four piano accompaniment staves. The score is numbered 9 through 17. The piano accompaniment includes various dynamics such as *pp*, *p*, and *f*. The vocal line is written in a soprano clef. The score is a page from a larger musical manuscript.

*) By permission of M. Bahn, Berlin.
**) Better bass-clarinet in *A*, playing in *G*).

Measures 18-23 of a musical score. The score is written for a grand staff (treble and bass clefs) and includes dynamic markings *f* (forte) and *p* (piano). The key signature is three sharps (F#, C#, G#). The notation includes various rhythmic values, including eighth and sixteenth notes, and rests. The measures are numbered 18, 19, 20, 21, 22, and 23.

Measures 24-30 of a musical score. The score is written for a grand staff (treble and bass clefs) and includes dynamic markings *f* (forte) and *mf* (mezzo-forte). The key signature is three sharps (F#, C#, G#). The notation includes various rhythmic values, including eighth and sixteenth notes, and rests. The measures are numbered 24, 25, 26, 27, 28, 29, and 30.

Measures 31-37 of a musical score. The score is written for a grand staff (treble and bass clefs) and includes piano (p) and piano-piano (pp) dynamics. Measure 31 features a piano (p) dynamic. Measures 32-33 include a *dim.* (diminuendo) marking. Measures 34-37 continue with piano (p) and piano-piano (pp) dynamics. The notation includes various note values, rests, and slurs.

Measures 38-45 of a musical score. The score is written for a grand staff (treble and bass clefs) and includes piano (p) and piano-piano (pp) dynamics. Measure 38 features a piano (p) dynamic. Measures 39-40 include a *dim.* (diminuendo) marking. Measures 41-45 continue with piano (p) and piano-piano (pp) dynamics. The notation includes various note values, rests, and slurs.

The musical score is divided into two systems. The first system covers measures 46 to 53, and the second system covers measures 54 to 62. The key signature is G major (one sharp). The tempo and meter are not explicitly stated but are implied by the notation. The score includes various dynamics: *pp* (pianissimo), *mf* (mezzo-forte), and *p* (piano). A *dolce* marking is used in measures 56 and 57. The instrumentation includes piano, violin I, violin II, viola, cello, double bass, flute, clarinet I, and bassoon. The score shows various musical notations including eighth notes, sixteenth notes, and rests.

No. 2. This charming little characteristic piece by Kullak is extremely simple for pianoforte, but offers more difficulties to the arranger for the ten instruments than Schumann's piece, since notes are fewer in the original, and so a good deal must be added and in such a manner that the original is still recognisable, and the additions do not cumber it. A softer and milder tone-colour would be obtained by transposing the piece to *D*, which also would render it easier of performance, but the original key has been preserved that the arrangement may be compared the more readily with the original piece. The following alterations etc. have been made: bars 1—8 the original is reproduced by clarinet I and bassoons, and soft sounding instruments (flute, clarinet I and

bass-clarinet) are added to fill up the harmony. Bars 9—16 (repetition of 1—8) introduce some doubling of the outer parts in unison and the 8^{ve}, the bassoon I is strengthened by clarinet II, and oboe and English-horn have added parts. To lighten the tone-colour bars 9—16 might be played by the oboes, but in that case clarinet II must take the added part of oboe II and not support bassoon I. The wavy figure in 17—18 is doubled in unison and two parts are added to sustain the harmony. Notwithstanding the *c*[#] and *e* sounding on, the same notes are easily heard in the moving figure. To avoid using the same tone-colour in bars 19—20 the two parts are doubled in the higher octave and an added part is given to oboe I. The bass-clarinet and bassoon II have the same effect here as in bars 17—18, and bars 21—22 are similar to these; bars 23—24 are a repetition of bars 21—22 with the moving parts doubled in the higher 8^{ve} and four parts are added. In bars 24—32 doubled parts in the 8^{ve} occur, which are easily discoverable. Bars 33—40 are a repetition of bars 9—16 with two parts added for bassoons. The instruments (e. g. clarinet I) which take the melody *p*, and the instruments which sustain the harmony play *pp* that the former may be the more distinctly audible, although they are tripled occasionally. In bars 41—47 the theme is treated as before, though a small decorative figure is given to the flute (in bars 42—46). Bars 48—50 are as in the original with an added part for bass-clarinet. In bars 50—57 are added parts (clarinet I and bass-clarinet); bars 52—56 outer parts doubled in the 8^{ve} and 2 added parts (clarinets); bars 56—59 as in original with three added parts. The closing bars are strengthened by doubling the melody and the bass and by added parts for oboe, clarinet II and bass-clarinet. This example is now and then rather heavily scored in order to show how to make all the instruments take part effectively in a simple piece. It might be scored in various other ways, yet as it stands it is not without a good effect if well played.

Exercise VIII^a.

Chorale for 11 instruments.

Original. „O Haupt, voll Blut und Wunden.“

Flauti. Sopr. Ten. Bass. Free part.

Oboi. Flauto I. Oboi. Corno inglese. Clarinetti in B \flat . Clarinetto basso in B \flat . Fagotti. Contrafag.

Flauto piccolo. Sopr. Ten. Bass. Free part.

This chorale calls (by reason of the text) for less brilliant scoring than the preceding examples or in a). This latter, however, serves to show how the parts may be divided among the instruments. In a) the treble occurs in 3 parts, and by the flutes being doubled in unison and oboe together it is very brilliant: the alto, tenor and added parts are doubled in unison and the bass in the 8^{ve}. A trifle milder effect would occur if flute II and oboe I were in unison or both flutes playing with oboe I. In this arrangement the chorale would be more effective in *D*-mi or *E*-mi. In b) a piccolo is used, (though its tone-colour renders it very inappropriate) and the treble sounds through 3 octaves. The remaining voices are as in a) with the middle voice doubled in the higher 8^{ve}. The added part is doubled in unison by bass-clarinet and bassoon I.

The chorale might with advantage be arranged in a much milder colour for

Treble — 2 flutes (8^{ves}) oboe, clarinet (flute II and oboe I and clarinet II in unison).

Alto — oboe II, clarinet II (unison) or English-horn and bass-clarinet.

Tenor — English-horn and bassoon I (unison).

Bass — bass-clarinet, bassoon (unison) or double bassoon (8^{ve} lower), 2 bassoons and double-bassoon.

*) Bassoon I may play the treble an 8^{ve} lower than oboe I.

Exercise VIII^b.

73

Free arrangement for 11 instruments.

Beethoven, Funeral march.
Maestoso.

Original.
Pianoforte.

Flauti.

Oboi.

Corno inglese.

Clarineti in B \flat .

Clarinetto basso in B \flat .

Fagotti.

Contrafagotto.

7 8 9 10 11 12

p *p* *cresc.* *f* *p* *cresc.* *p* *cresc.* *f* *p* *cresc.* *f* *p*

13 14 15 16 17 18

cresc. *p* *pp* *sf*

cresc. *cresc.* *p* *pp* *sf*

cresc. *cresc.* *p* *pp* *sf*

cresc. *cresc.* *p* *pp* *sf*

cresc. *cresc.* *p* *pp* *sf*

cresc. *cresc.* *p* *pp* *sf*

19 20 21 22 23 24 25

ff *sf* *p* *cresc.* *f* *p*

ff *sf* *p* *cresc.* *f* *p*

ff *sf* *p* *cresc.* *f* *p*

ff *sf* *p* *cresc.* *f* *p*

ff *sf* *p* *cresc.* *f* *p*

ff *sf* *p* *cresc.* *f* *p*

26 27 28 29 30

cresc. *f* *più f* *p*

f *più f* *più f* *p* *a* *

cresc. *f* *più f* *p* *f* *ff*

cresc. *f* *più f* *p* *f* *ff*

cresc. *f* *più f* *p* *f* *ff*

cresc. *f* *più f* *p* *f* *ff*

p *f* *sf* *sf*

Red. *b* *c* *d*

p *f* *ff* *sf* *sf*

p *f* *ff* *sf* *sf*

p *f* *ff* *sf* *sf*

p *f* *ff* *sf* *sf*

p *f* *ff* *sf* *sf*

p *f* *ff* *sf* *sf*

*) A better effect would arise by filling in the harmony in bars *c* and *g* as shown by the small notes.

Musical score for piano and orchestra, measures 1-3. The piano part features a complex rhythmic pattern with many sixteenth notes. The orchestra part includes strings and woodwinds. Dynamics include *p* (piano), *f* (forte), *ff* (fortissimo), and *sf* (sforzando).

Labels: *Red.*, *e*, *f*, *g*.


Musical score for piano and orchestra, measures 4-7. The piano part continues with complex rhythmic patterns. The orchestra part includes strings and woodwinds. Dynamics include *p* (piano), *f* (forte), *ff* (fortissimo), and *sf* (sforzando).

Labels: *h*, *i*, *1*, *2*.

(See Bars 3-29.)

CODA.

The musical score for the Coda section consists of 20 measures. The notation is complex, featuring many beamed sixteenth and thirty-second notes, and frequent use of slurs and dynamic markings. The letters k, l, m, n, o, p, and q are placed below the staves to indicate specific measures or groups of measures. The score is written for a large ensemble, including piano, strings, woodwinds, and brass. The key signature is A-minor (three flats). The tempo is marked 'poco rit. decresc.' and the dynamics range from 'p' (piano) to 'pp' (pianissimo). The score includes various musical notations such as crescendos, sforzandos, and slurs.

As the above piece in the original was difficult for the 11 instruments to play, it is transposed to *A-minor*; and to obtain a darker tone-colour clarinets and bassoons are used in the low register in bars 1–4. The use of these instruments was necessary because the notes would be too low for the others. Flute II strengthens clarinet I in these bars to make the colour sadder. In bars 5–8 the 4 upper voices are strengthened in the higher 8^{ve} by flutes, oboe I and English-horn, which is done to enhance the effect and to vary the colour. The same thing occurs in bars 9–16. Bars 17–18 could be played by 2 oboes or 2 flutes and 2 bassoons, but by doubling the added flute and clarinet in unison the tone would be duller if fuller. So in bars 19–20 a more effective *crescendo* and *f* is obtained. Bar 20 (bridge for return of theme I) is given to clarinets and bassoons alone to obtain a more compact combination of the tone of the theme. In bars 27–29 harmonious added notes occur to avoid the wide gap between the sustained harmony and the bass figure. In the major section the tremolo in bars *a* and *b* can only be reproduced thus. The strengthening of the *c* \sharp (oboe II), *a* (English-horn), *e* (bass-clarinet) and *a* (double-bassoon) serves to give more stability, as it were, to the tremolo. The figure  after the tremolo is strengthened in bar *a* by oboes, English-horn and bass-clarinet in unison: in bar *b* by 2 bassoons, English-horn and bass-clarinet in the lower 8^{ve}. If the 3rd *B* \flat in the bass in bar *c* were given to the bassoons alone the effect would only be comical. To avoid this the clarinets play this note as well. A still greater effect could be made here with more instruments. Bars *e* to *i* are scored in the same manner as the preceding bars. In bars *k* and *l* the bass-clarinet takes an added part which unites with bassoon I, and in bar *n* becomes once more a free part. In bar *m* oboe I plays the melody, and latter is joined by flute II, oboe II and English-horn sometimes playing the melody, at others filling in the harmony. In bars *p* and *q* the flutes lend a darker colour to the closing bars and are not intended only to strengthen the parts. Bassoon II (in bars *p* and *q*) sustains the low *a*, supported by the bass-clarinet but sounding rather duller; bassoon I takes the rhythmic figure *p*, which sounds somewhat dull and distant through the sustained *a* of the bassoon II and bass-clarinet.

Exercise IX^a.

Chorale for 12 instruments.

„Werde munter, mein Gemüthe.“

Original.



<p>a)</p> <p>Flauto piccolo.</p> <p>Flauti.</p> <p>Oboi.</p> <p>Corno inglese.</p> <p>Clarinetti in A.</p> <p>Clarinetto basso in B\flat.</p> <p>Fagotti.</p> <p>Contrafagotto.</p>	<p>b)</p> <p>Flauto piccolo.</p> <p>Flauto I.</p> <p>Oboi.</p> <p>Corno inglese.</p> <p>Clarinetti in B\flat.</p> <p>Clarinetto basso in B\flat.</p> <p>Corno bassetto.</p> <p>Fagotti.</p> <p>Contrafagotto.</p>
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Here the treble occurs in several instruments. The piccolo in this register is of little effect, and if written an 8^{ve} higher it would sound very shrill. Therefore it would be better if the 1st flute played an 8^{ve} higher as the treble is (in the oboe part) in the same register as in the original. The alto and tenor part is doubled in unison; the bass in 8^{ves}. The 1st bassoon could also take the treble-part an octave lower than the original so that the only added part would be that of the bass-clarinet. In b) treble, alto and tenor are tripled, the treble in 3 8^{ves}, alto and tenor doubled in unison and the higher 8^{ve}, the free part single and the bass doubled in 8^{ves}. The parts might also be divided thus:

Treble (4-fold) 1 piccolo, (flute, oboe II, clarinet II in unison), bassoon I an 8^{ve} lower.

Alto (2-fold) oboe I and clarinet II (unison or 8^{ves}).

Tenor (2-fold) clarinet I and English-horn (unison or 8^{ves}).

Free part (single) basset-horn.

Bass (3-fold), bass-clarinet and bassoon in unison and double-bassoon an 8^{ve} lower.

Without the added part, thus:

e) *Treble* (3-fold), oboe (unison), clarinet, flute 8^{ve} higher.

Alto (3-fold), flute II, oboe II, clarinet II (unison or oboe and clarinet unison and flute II an 8^{ve} higher).

Tenor (3-fold), basset-horn, English-horn, bassoon I (unison).

Bass (3-fold), bass-clarinet, bassoon II and double-bassoon (bass-clarinet and bassoon II unison and double-bassoon an 8^{ve} lower).

*) Two free parts.

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Rob. Schumann, Op. 15, No. 6.

The choice of this piece is intended to show how all the instruments can be utilized simultaneously in a free arrangement. In bars 1—4 the 3 upper parts are doubled in the higher 8^{ve} by the flutes, and a free part occurs for bass-clarinet. In bars 5—8 they are doubled by 2 flutes and oboe I, bar 5 bassoon I has a free part. The bassoon II and double-bassoon take the bass in the lower 8^{ve}, bassoon I an 8^{ve} higher. Bars 9—16 are scored similarly to bars 1—8.

Exercise X.**Chorale for 13 instruments.**

„Ach bleib' mit deiner Gnade.“

Original.

Flauto piccolo.

Flauti.

Oboi.

Corno inglese.

Clarinetti in B \flat .

Clarinetto basso in B \flat . Free part.

Corno di bassetto. Ten.

Fagotti. Bass.

Contrafagotto.

This work is similar to the preceding: 4 trebles (in 8^{ves}); 3 altos, 3 tenors (unison and 8^{ves}); 1 free part and 2 basses (in 8^{ves}). It would have been better to omit the free part and to strengthen the bass in the upper 8^{ve} by means of the bass-clarinet. The middle parts also could be treated as in IX^a. The parts might also be divided thus:

Treble 3, alto 3, tenor 3, free part I, bass 3 or
Treble 4, alto 2, tenor 2, free part 2, bass 3.

Exercise XI.**Chorale for 14 instruments.**

„Ich weiss, mein Gott, dass all' mein Thun.“

Original.

Flauto piccolo.

Flauti.

Oboi. Sopr.

2 Corni inglesi. Alt.

Clarinetti in C. Free part.

Clarinetto basso in B \flat . Ten.

Corno di bassetto. Bass.

Fagotti.

Contrafagotto.

The chorale is here transposed to C in the arrangement for 14 instruments, though it would sound quite well in the original key. Treble is 4-fold, alto, tenor and bass 3 and a free part occurs. The middle voices are strengthened in the upper 8^{ve}, but this could be arranged differently since the parts might be as in IX^a (middle parts in unison). If the added part be omitted the parts could be divided thus: 4 treble, 3 alto and tenor, and 4 bass: or 3 treble, alto, tenor and bass and two free parts. Free arrangements for 14 instruments may be passed over.

Exercise XII.

Such instruments as the flutes in D \flat , third-flute, clarinets in A \flat and E \flat do not occur in such an orchestra as that of which we are now treating. The parts may be divided thus:

- 1) Treble 4, alto and tenor each 3, bass 5.
- 2) Treble 5, alto and tenor each 3, bass 4 or
- 3) Treble 4, alto and tenor each 3, free part 1, bass 4.

Chorale for 15 instruments.

- 1) Small flute in D \flat , 2 flutes, 2 oboes, English-horn, clarinet in E \flat , 2 clarinets in B \flat , 2 bass-clarinets in B \flat , 1 basset-horn, 2 bassoons, 1 double-bassoon.
- 2) Small D \flat -flute, 1 third flute, 2 oboes, English-horn, clarinets in A \flat , E \flat and 2 in B \flat , 2 bass-clarinets, 1 basset-horn, 2 bassoons, 1 double-bassoon.
- 3) one small D \flat -flute, flute, 2 oboes, English-horn, clarinets in A \flat , E \flat , clarinet I in B \flat , clarinet II in B \flat , clarinet III in B \flat , bass-clarinet in B \flat , basset-horn, 2 bassoons, 1 double-bassoon.

Exercise XIII.

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Arrangement of a song with wood-wind accompaniment.

Franz Schubert, 'Morgengruss'.

Mässig. Bar 12.

Voice. Mezzo Soprano.

Original. Pianoforte.

Flauti.

Oboe I.

Clarinetti in B \flat .

Fagotti.

Blick so sehr? So muss ich wieder ge - hen, so muss ich wieder ge - hen, wieder ge - hen.

The 4 opening bars are transcribed literally as it were from the original, for 2 flutes, 2 clarinets, 2 bassoons, the upper part could be given to a flute or oboe, though in the case of the first the tone would be too dull, and in the other too harsh. Therefore our first arrangement is best. The flutes sustain added parts, in consequence of which bars 1-4 are rather too dark in colour to be quite suitable. It is, however, necessary, since no other instrument is at hand for the purpose. Bars 5-11 offer nothing new to the arranger. If bars 12-15 were transcribed for 2 instruments only, in performance they would sound ridiculous; the harmony is filled in by added parts for flute II, clarinet II and bassoon I. Clarinet I plays the quaver figure throughout. In bars 16-19 are added parts for clarinets: bassoon I takes the triplet figure [cf. part I (Field-Nocturne), as to accompanying a quaver figure] and the oboe, in its noblest register, enters as solo instrument. Bars 20-21 are as in the pianoforte part; but bars 22-23 were not possible thus as the low notes are only produced with difficulty *pp* by the bassoons. Slight alterations could be made in bars 12-15, as by giving to the bassoons the bass in 8^{ves} and the upper sustained notes to flute II and clarinet II. Then, however, the effect of colour would be stronger and darker. From bar 16 (with preceding quaver) the first flute might play (to bar 21) the voice-part an 8^{ve} higher, which would cause no ill effect.

2. Franz Schubert, 'Thränenregen'.

Ziemlich langsam.
Brook. Der

Original.
Pianoforte.

Flauto I.

Oboe I.

Clarinetti
in A.

Fagotti.

Takte 12 13 14

As this melody offers few difficulties for the arranger for the set instruments, it is only necessary to analyse bars 12–14, which in the pianoforte part seem not easily dealt with. The quaver figure is retained as a pure quaver figure and given to flute and oboe in 8^{ves}, while clarinet I plays the semi-quaver figure tolerably accurately with the original: clarinet II plays an added part. The bassoons play the parts written in the bass clef, though on the 2nd beat bassoon I has an added part, and in bar 14 the lower 8^{ve} is added for bassoon II.

3. Mendelssohn, 'Venetian Gondola Song'.

Allegro non troppo.

Voice.
Soprano.

Original.
Pianoforte.

Wenn durch die Pia-zet - ta die A - bendluft weht, dann

a) b) c) d)

Flauti.

Clarinetti
in A.

Fagotti.

e) f)

Clarinetti
in A.

Clarinetto
basso in B \flat .

Fagotti.

Contrafagotto.

g)

Flauti.

Clarinetti
in A.

Clarinetto
basso in B \flat .

Fagotti.

Contrafag.

No. 3. Here the accompanying figure proceeds with almost unfailing regularity through the entire piece, as is shown above. Of these bars one only varies, and may be scored as in Ex. a, b, c or d. In b, c and d, the flute-part could be as in a. Ex. e and f show bar I in the same arrangement for other instruments. In g the quaver figure is given to the two flutes in the higher 8^{ve}, (the piece here being more heavily scored) while the other instruments sustain the full harmony in a deeper register. This freedom, (placing the accompaniment an 8^{ve} higher), may in certain circumstances, like the present, be of very good and characteristic effect.

4. Mendelssohn, 'Suleika'.

Andante sostenuto.

Voice.
Soprano.Original.
Pianoforte.Clarinetti
in A.Clarinetto
basso in B \flat .

Fagotti.

The musical score is for Mendelssohn's 'Suleika'. It features a Soprano voice part with the lyrics: 'Ach, um dei - - - ne feuch - - - ten'. Below the voice part is the original piano accompaniment. Further down, there are parts for Clarinet in A, Bass Clarinet in B \flat , and Bassoons. The bottom section of the score shows a more complex arrangement with additional parts for the woodwinds, including a second bassoon part that plays a minim $b\sharp_4$ in bars 3 and 4. The lyrics for this section are: 'Schwin - gen, West, wie sehr ich dich be - - nei - - de! denn du'.

If this song were arranged precisely as in the original it would sound very thin and empty. In order to obtain a better effect, free parts must be added. Here they are given to clarinet II and bass-clarinet. In bars 3 and 4 bassoon II plays a minim $b\sharp_4$ while bassoon I plays the original. Later on 2 flutes are necessary. The semi-quaver figure is more flowing in performance without the rest.

These pieces may be arranged thus:

Frz. Schubert, 'Des Baches Wiegenlied' (2 flutes, 2 clarinets, 1 bass-clarinet, 1 bassoon).

" " 'Der Wegweiser' (2 clarinets, 2 bassoons).

" " 'Die Nebensonnen' (2 clarinets, 2 bassoons).

" " 'Ihr Bild' (2 flutes, 2 clarinets, 2 bassoons).

" " 'Du bist die Ruh' (2 flutes, 2 clarinets, 2 bassoons).

" " 'Horch, die Lerch' (2 flutes, 2 oboes, 2 clarinets, 2 bassoons).

" " 'Schäfers Klagelied' (2 flutes, 2 clarinets, 1 bass-clarinet, 2 bassoons).

" " 'Das Wirthshaus' (2 flutes, 2 clarinets, 1 bass-clarinet, 2 bassoons).

" " 'Der Tod und das Mädchen' (2 clarinets, 1 bass-clarinet, 2 bassoons, 1 double-bassoon).

" " Op. 4, No. 4. Erster Verlust (2 flutes, 2 clarinets, 2 bassoons).

" " Op. 5, No. 5. 'Der König von Thule' (2 clarinets, 1 bass-clarinet, 2 bassoons, 1 double-bassoon).

" " 'Die Rose' (2 flutes, 2 oboes, 2 clarinets, 2 bassoons)

" " 'Im Abendroth' (2 flutes, 2 oboes, 2 clarinets, 2 bassoons)

} Peter's Vol. II.

Mendelssohn, 'Maienlied' (2 clarinets, 2 bassoons) [and flute].

" 'Sonntagslied' (2 flutes, 2 clarinets, 2 bassoons etc.